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# GAZETTEER OF THE WORLD,

OR

## DICTIONARY OF GEOGRAPHICAL KNOWLEDGE,

COMPILED FROM THE MOST RECENT AUTHORITIES,

AND FORMING A COMPLETE

BODY OF MODERN GEOGRAPHY,

PHYSICAL, POLITICAL, STATISTICAL, HISTORICAL, AND  
ETHNOGRAPHICAL.

EDITED BY

A MEMBER OF THE ROYAL GEOGRAPHICAL SOCIETY.



ILLUSTRATED WITH NUMEROUS WOODCUTS AND ONE HUNDRED AND TWENTY ENGRAVINGS ON STEEL.

VOL. IV.

HENSBURROW—LURIN.

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# GAZETTEER OF THE WORLD,

## OR DICTIONARY OF GEOGRAPHICAL KNOWLEDGE.

### HEN

**HENSBURROW**, or **HENSBOROUGH**, a mountain near St. Austell's, in Cornwall. It is a boss of granitic high land, elevated 1,034 ft. above sea-level, and one of the highest points in the co. The prospect from its summit is very extensive and beautiful, stretching on the E into Devonshire, and on the W almost to the Land's End, and commanding views of the English and Bristol channels. The whole district of St. Austell's is sometimes called Hensburrow.

**HENSHAW**, a township in Haltwhistle p., Northumberland, 3½ m. E of Haltwhistle, on the line of the Newcastle and Carlisle railway. Pop. in 1831, 619; in 1851, 615.

**HENSLES**, a commune and village of Belgium, in the prov. of Hainault, 11½ m. WNW of Mons. Pop. 1,919. Fine hemp is grown in the vicinity.

**HENSINGHAM**, a township in the p. of St. Bees, in Cumberland, 1½ m. SE of Whitehaven. Pop. 1,336.

**HENSLOW (CAPE)**, a cape on the S coast of New Georgia, in S lat. 10°.

**HENSTEAD**, a parish in Suffolk, 6 m. SE by E of Beccles. Area 1,918 acres. Pop. in 1851, 559.

**HENSTRIDGE**, a parish of Somersetshire, 6 m. S of Wincanton. Area 4,252 acres. Pop. in 1831, 1,074; in 1851, 1,136.

**HENTLAND**, a parish in Herefordshire, 4½ m. NW of Ross. Area 2,905 acres. Pop. 643.

**HENVIE**, a commune of France, in the dep. of Finistere, cant. of Taule. Pop. 1,241.

**HENZADAH**, a town of Birmah, on the Irawaddi, a little below the point where the Anoukioup branch of that river goes off in SW course to Bassein.

**HEONG-SHAN**, a town of China, in the prov. of Quang-tong, on an arm of the Canton river, 22 m. NW of Macao.

**HEPBURN**, a township in Lycoming co., in Pennsylvania, 9 m. N of Williamsport. Pop. 1,570.

**HEPPACH (GROSS)**, a large village of Wurtemberg, 8 m. SE of Stuttgart, on the r. bank of the Rems. Pop. 1,300.

**HEPPENHEIM**, a town of Hesse-Darmstadt, in the Bergstrass, 17 m. NNW of Heidelberg. Pop. 4,170.—Also a town of Bavaria, 4 m. SE of Worms, on the Eisbach.

**HEPTONSTALL**, a township in the p. of Halifax, in the W. R. of Yorkshire, 8 m. W of Halifax. Pop. 4,177.

**HEPWORTH**, a township in Kirk-Burton p., in the W. R. of Yorkshire, 8 m. S of Huddersfield. Area 3,370 acres. Pop. 1,532.—Also a parish of Suffolk, 11 m. NE of Bury St. Edmund's. Area 1,677 acres. Pop. 582.

**HERACLEA**. See **EREKLI**.

IV.

### HER

**HERACLIA**, an uninhabited rocky islet of the Archipelago, 6 m. S of Naxos.

**HERALETZ**, a village of Bohemia, in the circle of Czeslau, near Humbolec.

**HERAT**, or **HERAUT**, a district in the NW of Afghanistan, formerly an independent state. Its present extent, from Ouch on the E, to Ghorian on the W, is only about 120 m.; and its breadth, from Kurakh on the N, to Salzawar, or Isfazar, on the S, is about 90 m. In the present article we shall describe the whole territory to which the name has been applied, and which includes the tract to the N of the mountain-range that bounds the plateau, as well as the range itself, and the ancient Aria to the S of it; so that it comprehends the ancient *Margiana*, the hill-country of Paropamisus, and *Aria* or *Ariana*. The NW angle is an immense desert connected with that of Khwarazm, or Khorassan. In this there is no cultivated spot or permanent dwelling; and the shifting pop. consists of a few tribes of wandering Turkomans. The N face of the dividing range of mountains which overlooks this desert, sweeps down so gradually to its base as to afford, in its valleys and ravines, a quantity of rich land watered by numerous streamlets. This was once a well-peopled and cultivated district. It contained the large cities of Nisa, Bawerd, Duruhu, Mehineh or Mahan, Shurukhs or Serukhs, Jafari, and Caender or Gandar, with their dependent villages; all of which—Shurukhs excepted—are now totally deserted, in consequence of the continual attacks of plundering Turkomans, who have full possession of the whole tract, and pitch their tents on the ruins of ancient civilization. From the city of Herat to Marou the road lies through a desert. From Murgahab to Herat the country is quite uninhabited, except by a few Eels. To the E of Herat the country is wholly mountainous, and the abode of pastoral tribes. To the S, lies a desert of some extent, separating it from the district of Furrah, in the Durani country.

*Mountains.*] The great range of the Elburz, separating Persia from Khwarazm and the basin of the Oxus, passes to the N of Herat. It corresponds to the *Montes Seriphi* of Ptolemy; and runs E till it joins the Hindu-kush, or Indian Caucasus. We can say but little concerning the elevation or breadth of this range, as it has not been explored in this part of its course by any European traveller. On the road from Meschid to Herat, the range runs generally to the l. of the route at no great distance, and is denominated by the natives, the Kohistan, or Mountain country. It increases in height as it

proceeds eastward, and is of considerable elevation to the NW of Herat. E of Herat it expands to a breadth of 200 m., according to Elphinstone's information, and is 350 m. in length; presenting a confused mass of mountains such as the most intimate knowledge could scarcely enable the traveller to trace, and which, though affording a habitation for wandering tribes, is so difficult of access, and so little frequented, that no precise accounts of its geography are to be obtained. The western half is less rugged than the eastern; but even in it the hills present a steep and lofty face towards H.,—the roads wind through rough valleys and over high ridges,—and some of the forts are so inaccessible that visitors must be drawn up with ropes by the garrison. Still the valleys are cultivated, and produce wheat, barley, and millet, and almonds. The NW part, inhabited by the Jumshedis, is more level and fertile; the hills are here sloping and well-wooded; the valleys rich, and watered by the Murgab. The south of the Tymuni lands also contains some wide and grassy valleys. The whole of the Paropamisus—Sanskrit *Parapanis*, or 'Mountain of springs'—abounds in springs. The E part is far more rugged, steep, and barren than the W. The country is here in many places impassable for horsemen. From the N face of the Paropamisian range, the descent is sudden and great to the plains of Bactria watered by the Oxus, which stretch, without a single break or undulation, to the very foot of these mountains, as to a wall. Several passes lead through this tract, from the Durani country, or Western Afghanistan, to Bactria. One of these leads straight N from Candahar to Balkh, which is the most western; and another from Cabul to the same city, by Bamian; but these passes are generally covered with snow, and impassable in winter. At Akrobat, a few m. N of Bamian, another route strikes off to the NW, and crosses the Paropamisus at a lower elevation. From Bamian another route runs straight W, and joins the road from Candahar to Balkh, 50 m. W of Bamian. The mountains on this route are covered with snow only about 4 months annually. The eastern termination of this mountain-plateau is exceedingly lofty, containing in its embrace the sources of the Bactrian rivers, those of Cabul and Ghizni, and the upper course of the Helmund and its northern tributaries. This tract includes the high land of Bamian, the Koh-i-Baba, the Kohistan of Cabul, and the western termination of the Hindu-kush.

*Rivers.]* There are but few rivers of any note in this country. The chief is the Hury or Herirud, or river of Herat. It rises in the territory of the Hazarehs, and runs W, passing 3 m. S of the city of Herat, whose beautiful and extensive valley it waters and fertilizes. A bridge originally of 33 arches crosses the river at this point. It then turns NW, and runs in that direction to Maru Shah-Jehan, receiving a little below Shurukhs the Tedjen, and a little farther on, the river of Meschid. From Maru it runs N and NW; but whether it falls into the Oxus, or into the Caspian sea, or is lost in a marsh or pool, has not yet been fully ascertained. By Rennel, it is made to fall into the Oxus at Amol; Fraser and Elphinstone represent it as being lost in the marsh of Balacamber. It is believed, with good reason, to have once entered the Caspian, under the name of the Ochus, at the bay of Balkan. It receives a number of streams before it arrives at Herat, where the greater part of its water is expended in the vicinity on the cultivation, as several canals are cut from it and pass through the city.—The Murgab, the *Marqus* of Ptolemy, rises in numerous streams in the Hazareh hills. It runs a NW course to Marushah, or Maru-al-Rudd, where it is joined by the Kyser

flowing NW from the same mountains. A little farther to the NW the combined stream joins the Palimalan or Herirud at Seri Bund.—The Tedjen is rather a small and unimportant stream, rising in the mountains to the N of Herat, and running NW to the Palimalan.—There is no lake of consequence in this country.

*Climate and productions.]* The climate of this region must vary much with physical circumstances. At Herat the winter cold is extreme; while in summer, were it not for a permanent NW wind, the heat would be oppressive. On the high uplands of Paropamisus, the cold must be severe, while the summer-heats will be temperate, unless in deep and narrow glens and valleys. As the general level of the Paropamisian country cannot be under 5,000 ft. of elevation, and must be much more at the E extremity, near the base of the Hindu-kush, the cold of winter must be excessive here. In that season, we know, it is impossible to travel from Herat to Cabul, on account of the deep snows, which continue to fall for weeks together. Sultan Baber tells us, in his *Memoirs*, that, in attempting the road in winter through this region, though in the lat. of 34°, he and his men narrowly escaped perishing on the road between Chekcheran and Yekauleng.—As the Paropamisus is a pastoral country, its agricultural productions are scanty; but the valley of Herat is renowned for its fertility. This valley is 30 m. in length, and about half that extent in breadth, and the whole is covered with villages and gardens, and well watered with streams and canals drawn from the river. Besides abundance of the finest fruit-trees, the environs of Herat produce vast numbers of mulberry-trees, which are planted in the gardens for rearing silk-worms. Cotton is largely cultivated, and a considerable quantity of opium is grown. Pasture of the best quality exists on the neighbouring hills; wheat and barley are abundantly produced; and all the necessities of life are cheap and plentiful. The districts of Ghorian and Iam, on the road from Herat to Meschid, are said to be fertile and well-peopled, thickly interspersed with gardens and villages. The district of Maru, or Merve, is said to be renowned for its fertility. It is, however, but a small district—a mere oasis in a desert of sand, as the cultivable soil does not extend above 12 or 14 m. around the city. The district of Seahynd, in the SW angle of the Paropamisian hills, is fertile and well-watered. Baber remarks in his *Memoirs*—for it is from him chiefly that we have our information respecting this country—that all the grazing-grounds are in the valleys; the hills are not clothed with grass like the mountains of Turkistan, nor are they even well-wooded with pine-forests. Above the hills, the country is good riding-ground, and level. Deer are numerous in these mountains. The courses of the streams are profound glens, often quite perpendicular, and incapable of being descended. Baber mentions it as a singular circumstance, that while, in all other mountainous tracts, the strong-holds, and steep and rugged places, are at the tops of the hills, here they are all towards the bottom. These remarks he applies to the hill-countries of Ghour, Karmed, and Hazareh.

*Inhabitants and population.]* Our materials on this subject, as well as on the physical geography and features of this region, are very scanty. The inhabitants of the district are mostly denominated Tadjiks, an appellation generally bestowed on the agricultural population, who speak Persian as their vernacular tongue, in opposition to their Turkish and Afghan masters, who use the Turkish and Pushtu languages. These Tadjiks are the descendants of Persians and Arabs, commingled by marriage, lan



guage, religion, and manners; and are by far the best and most industrious part of the pop. of Eastern Persia. They are a race remarkable for their love of fixed dwellings, and their attachment to agriculture and settled employments, in which they are a perfect contrast to the other inhabitants, the descendants of Scythian horsemen, who still retain the roving, desultory, unfixed habits of their pastoral ancestors. The Tadjiks are a mixed race, of Arab and Arian descent. The other inhabitants are Durani Afghans, Turks, erroneously called Moguls, Hindus, &c. The Paropamisian country is inhabited by the Eimaks and Hazarehs. They are different in language, appearance, and manners from the Afghans, and bear some resemblance to their Turkish neighbours on the N, but differ in this, that they use a dialect of the Persian language. The Eimaks inhabit the western division, and the Hazarehs the eastern division of this region. The whole numbers of the Eimak pop. E of Herat, exclusive of the Timuris and Hazarehs, are estimated by Elphinston's information at from 400,000 to 450,000 souls; by Fraser's account they are made much fewer.

*Cities and Towns.* In the Paropamisian country are the cities of Ghorat, Bamian, and Seabund, of which we have no other information than that they are or were the abodes of the hakims of the Afghan monarchs, appointed to keep the Eimaks and Hazarehs in order. The present city of Bamian is certainly not on the spot of the old city, ruined by the Mongols, but on another site in the immediate neighbourhood. Ghorat is about two degrees to the S of Bamian. Seabund or Shahbund is on the SW angle of the Paropamisian country, in the prov. of the Eimaks. What is called the kingdom of H., in contradistinction to the rest of Eastern Persia, once abounded in numerous and populous cities, as Nesa, Bawerd, Caendar, Maru-Shah-Jehan, Maru-al-Rud, Mahan, Badagis, Sherruks, Turbut-i-Jami, Ahengeran, Goriana, Herat, &c. But the most of these have long since disappeared, leaving nothing but their ruins, from the want of a sufficient protecting government, the frequent revolutions for political power, and the vicinity of these powerful and constant enemies of peace and industry, the Turcomans and Usbeks. Maru-al-rud is on the Murghab, 120 m. SE of its junction with the Herirud. Nesa apparently corresponds with the *Nisaia* of Strabo, and the *Aparbarica*, and *Gadar*, of Isidore, of Charax. The inhabitants of Caendar and its district are named *Gandarii* by Pliny and Herodotus. Badagis corresponds to the *Bilaxa* of Ptolemy. It was once a place of note, but is now of small account. Its site does not appear in the maps of Elphinston and Fraser, but it lies NW of Herat. Mahan is called Mehineh by Fraser, and lies in the Attock, or skirt of the hills that separates Gurgan from the desert of Khawarism. Shuruckh is a very ancient place, the *Siroc* of Isidore, 120 m. NE of Meschid, on the N slope of the Sariphi mountains. Being a caravan-station on the road from Meschid, to Bokhara and Balkh, it is a place of some consequence. Turbut-i-Jami, half-way between Herat and Meschid, is the cap. of a well-peopled and fertile district, and is famed for being the birth-place of the poet Jami, author of the poem of 'Yussuff and Zuleika,' a production greatly admired in the East. Ahengeran, the cap. of the Ghoriani district, lies to the W of Herat. We have little difficulty in identifying Ghorian with the *Guriane* of Ptolemy. He places it between what he calls the two principal branches of the *Margus* in Margiana; but it is clear to us that his S branch of the *Margus* is the river of Heri, and his *Arius* the river of Furrah; for the *Etymandrus* or *Helmund* is not mentioned by him.

HERAT, or HERAUT, the ancient *Aria*, or *Artacoana*, at present the largest and most populous city in the district above described, and of Khorassan in its widest signification, has always been a city of note. It owes its importance to its fine situation, and the commerce it enjoys, as the chief if not the only channel of transit between Eastern and Western Asia. It is situated in N lat. 34° 22', E long. 62° 9', in a spacious plain surrounded on all sides by lofty mountains, and having an alt. of 2,759 ft. above sea-level. This plain—as already noticed—owes its fertility to the river Hury or Herirud, which runs through the centre of it. The city embraces an area of 4 sq. m., and is encircled with a lofty mound and wall, and a wet ditch 30 ft. wide. The citadel, on the N face, is a small square castle elevated on a mound flanked with massive towers at the angles. The wall has a gate in each face, and two in that which fronts the N; and from each gate a spacious and well-supplied bazaar leads up towards the centre of the town. The principal street, from the S gate to the cattle-market opposite the citadel, is covered with a vaulted roof. H. is admirably supplied with water, almost every house having a fountain of its own, independent of the public ones on either side of the bazaars; yet the city itself is one of the dirtiest places in the world. The houses are generally two stories in height, built of mud, and with windows filled with Russian paper instead of glass. The residence of the prince is, in appearance, a mean building. The Mesjid-i-Jama, or chief mosque, was once a noble edifice, enclosing an area of 800 sq. yds.; but, having been much neglected, is now falling into decay. This, however, cannot be said of the other buildings of H. No city, perhaps, in the East has so little ground unoccupied. Christie computed it to contain in 1810, 100,000 inhabitants, of whom 10,000 were Patans; the remainder are Afghans, a few Jews, and about 600 Hindus. But Conolly, who visited H. in 1830, did not estimate the pop. at more than 45,000; while Mohan Lal estimated it in 1833 at 60,000, and the number of houses at 4,000. From its extensive trade, H. has obtained the appellation of *bundar*, or port. It is the emporium of the commerce carried on between Cabul, Cashmere, Bokhara, Hindostan, and Persia. From the former are received shawls, indigo, sugar, chintz, muslin, leather, and Tartary skins, which are exported to Meschid, Yedz, Kerman, Ispahan, and Tehran. In return are received dollars, tea, china-ware, broad-cloth, copper, pepper, and sugar-candy: dates and shawls from Kerman, and carpets from Ghaen. The exports of H. itself are silk, saffron, assafetida, pistachio-nuts, almonds, dried fruits, and rose-water. Its principal manufactures are whips, sadlery, silks of various fabrics and colours, silken and woollen carpets which are celebrated and in high demand over all the East for the beauty of their patterns and brilliancy and durability of their colours, sword-blades and cutlery, the former of which are equal to those of Meschid, and owe their excellence to the same cause, the transportation to this place of Damascene sword cutlers by Timur-Bek. The duties on merchandise, according to Captain Christie, was in 1810 a 16th part of a rupee on every 20 rupees' worth of goods sold in the city, which was levied on the purchaser; and a toll of 2 rupees on every camel's load of merchandise that leaves it; and taxes were imposed upon all serais, shops, and gardens. The aggregate amount of all was 4½ lacs of Persian rupees; and the revenue of the whole principality was estimated at 1,000,000 rupees, or £125,000 sterling.

*History.* Amid the revolutions which have afflicted, and still continue to afflict Persia, H. long continued to prosper; and no city in all Persia, with the exception of Ispahan, could vie with it in riches or population. It was a favourite residence of Shah



Rokh-Mirza, the greatest and best of the sons of Timur, and of his successors, till it was taken by Shaibani Khan in 1509, who put an end to the dynasty of Timur in Khorassan and Mawarannahr. At this period it possessed numerous and magnificent buildings, and was the chosen abode of science and literature in the East. During the reign of Hussein-Mirza, the court of H. was the most splendid and luxurious in Asia. A detailed account of the principal buildings of H., as they stood more than three centuries since, is given by Khondemir—himself a native of the place—who has described a tedious succession of mosques, colleges, caravanserais, palaces, &c., as also by Baber. On the defeat and death of Shaibani-Khan at Maron, by Shah Ismael Suffi, in 1510, H. remained under the Persian government till the period of the Afghan invasion, when it fell into the hands of the Abdali or Durani Afghans. It was recovered, after a ten months' siege, in 1731, by Nadir Shah. After the death of that conqueror it fell, in 1749, into the hands of Ahmed Shah Abdali, founder of the short-lived dynasty of the Cabul sovereigns, and has ever since been considered with the adjoining territory as a dependency of Cabul, and the residence of an Afghan prince. In the civil dissensions by which the Afghan monarchy has been torn to pieces, H. fell to the share of Mahmud Shah; who was succeeded by his son Shah Kamran. The Persians, stimulated it is said by Russian influence, besieged it in 1838; and though baffled in the attempt to take it, left it nearly in ruins. At the moment of this article going to press, intelligence has reached us of the death of Yar Mahomed Khan, the prince of H., on 4th June, 1851. He has been succeeded by his eldest son, Syed Mahomed Khan. But it is reported that the wily Dost Mahomed Khan of Cabul, alive to the opportunity afforded by this event of extending his power to the westward, has placed his son Hyder Khan at the head of a large army, with instructions to invade H. by the Balkh route. Hyder Khan, who married, according to Afghan custom, the widow of his brother Akbar Khan, daughter of Yar Mahomed, aspires to the succession of H., in virtue, it is understood, of that connexion; and Syed Mahomed is represented as an imbecile prince, utterly incompetent to the management of the country. It is not improbable that Persia also may again take the field with the view of annexing H. to her dominions, and that she will invoke once more the assistance of Russia, which Power, it is reported, has already, under pretext of repelling an invasion of Turkomans, landed a body of troops on the S coast of the Caspian.

**HERAULT**, a river of France, which has its source in the mountain of Laigoual, in the chain of the Cevennes, dep. of the Gard, arrond. and 11 m. N of Vigan, and 5 m. NW of Valleraugue. After passing the latter town, it directs its course to the S, and enters the dep. of the same name, in which it bathes the walls of Ganges, flows near Aniane, waters Gignac, Montagnac, Pezenas, and Bessan, and after a total course of about 93 m., of which 11 are navigable, falls into the Mediterranean 5 m. below Agde. Its principal affluents are the Arre, Vis, Boyne, and Tongue, on the r.; and on the l. the Rieutort. A little above Agde it is crossed by the Canal-du-Midi.

**HERAULT**, a department in the S of France, which takes its name from the river above described, and which consists of a portion of the ancient prov. of Languedoc. It lies between 43° 15' and 43° 55' N lat., and between 2° 33' and 4° 11' E long.; and comprises an area of 618,046 hectares. It is bounded on the N by the depts. of Aveyron and Gard; on the E by that of the Gard, from which it is partly separated by the Vidourle; on the SE by the Mediterranean; on the SW by the dep. of the Aude; and on the W by that of the Tarn. Pop. in 1801, 275,449; in 1821, 324,126; in 1831, 346,207; in 1841, 367,343; in 1846, 386,020.—The interior of the dep. consists of extensive, and, in some parts, marshy plains; the N and W districts are covered with the ranges of the Espinouse, the Orbe, the Black mountains, and the Garrigues, all moderately elevated branches of the Southern Cevennes; and numerous ramifications of that chain penetrate it towards the S, gradually declining in height as they approach the Mediterranean. The principal of these mountains are the Saranne, which rises on the r. bank of the Vis, at the confluence of that river with the Hérault; the Gardiole, between the lagune of Thau and the town of Montpellier, and belonging to the ridge which separates the basins of the Vidourle and Hérault; and the Malpas, which is 6 m. SW of

Beziers, and which is crossed by the Canal-du-Midi. The coast along the Mediterranean is to a great extent below sea-level, and forms vast lagunes, separated only from the sea by narrow tracts of land, and opening into it by narrow channels locally named *grau*. Of these lagunes the largest are those of Mauguio, Perols, Maguelonne, Thau, Vendres, and Capetang. The general inclination of this dep. is to the Mediterranean, and the principal rivers by which it is watered flow either directly into the sea, or into the lagunes which communicate with it. Of these rivers the Vidourle, the Lez, and the Hérault flow from N to S, the first of these skirting the E frontier of the dep.; the Orbe flows from NE to SW, and then from SW to SE, and receives the Jean, the Vialas, and the Bernasobres. The Canal-du-Midi enters the dep. on the SW, and runs to Agde near Hérault, whence the Canal-d'Agde runs to the town of Cette on the Mediterranean. The Canal-des-Etangs runs 17 m. along the line of lagunes between Aigues Mortes and Cette.—The climate of this dep. is pleasant and genial, and presents neither extreme of temp. The prevailing winds are from NW and SE.—The soil is fertile. Of the total area, 156,566 hect., or about one-fourth part, are arable; 103,662 are in vineyards; 77,644 are in wood; and 214,040 are heaths and wastes. The principal productions are wine, grain, olive-oil, timber, fruit, inclusive of figs and pomegranates, which are here found in great quantities. The culture of wine forms a staple branch of local industry. The annual produce is estimated at 2,080,000 hectolitres, of which 1,280,000 hect. are made into brandy and spirits; 400,000 are consumed in the dep., and 400,000 exported. The best kinds are the red wines of Saint-George-d'Orgues, Verargues, Saint-Geniez, and Castries, and the Muscat wines of Frontignan and Lunel. The quantity of grain raised in this dep. is inadequate to its consumption. The annual produce does not exceed 948,500 hect. of cereals, and 256,000 hect. of potatoes. Few cattle are reared; but between 500,000 and 600,000 sheep of an improved breed are reared, and form one of the chief sources of local wealth. Mules, pigs, and goats are numerous. The culture of silk is carried on here with great success, and produced in 1835, 372,390 kilog. of cocoons, and 21,072 kilog. or 46,358 lbs. of raw silk. Bees are also reared in great quantities; and yield an average export of wax to the value of nearly 1,000,000 francs. The pilchard, and other fisheries in the Mediterranean and in the lagunes, form another important branch of employment. Their annual produce is 75,000 quintals, valued at 545,000 francs. H. abounds with iron, copper, lead, coal, lignite, marble of the finest quality, gypsum, puzzolano, alabaster, granite, aluminous earth, and petroleum; and has numerous mineral springs, of which the most celebrated are those of Balaruc, Galian, Montpellier, Perols, Malou, and Avesne. In 1837, 12 mines of lignite, 9 of coal, 3 of iron, 4 of copper, and 1 of lead, were wrought within this dep.—H. possesses also considerable manufacturing industry. The distillation of brandy holds a chief place; that of Montpellier is esteemed the best in France. It has also extensive manufactories of cloth, silk and cotton fabrics, hosiery, liqueurs, comfits, perfumery, verdigris, and other chemical substances, leather, oil, salt, pottery, and wax-candles; also numerous wool-spinning and paper mills, and several dye-works. Wine and brandy form the chief articles of export in this dep.; but it has also an active trade in fruit, salt, wood, wax, and articles of local manufacture. A large portion of the cloth manufactured in this dep. is used in military clothing; the rest is sent to Spain, Italy, and the Levant. The

silk-hosiery finds also good markets in Italy and Spain.—The dep. of H., of which Montpellier is the capital, is divided into the 4 arrond. of Beziers, Lodeve, Montpellier, and St. Pons; and is subdivided into 33 cant., comprising 326 com. The number of electors in 1834 was 3,182; and the dep. returned 6 deputies to the legislature.—It forms the see of a bishop, suffragan of Avignon.—The entire territorial revenue was valued in 1846 at 21,586,000 francs; and the number of proprietaries at 120,616.

**HERBAS**, a town of Spain, in the prov. and 50 m. S of Salamanca.

**HERBAULT**, a canton and commune of France, in the dep. of Loir-et-Cher, 9 m. W of Blois. Pop. of com. 724; of cant. 12,995.

**HERBERTINGEN**, a village of Württemberg, in the Danube circle, 4 m. NW of Salgau. Pop. 1,340.

**HERBEUMONT**, a commune of Belgium, in the prov. of Luxemburg, 7 m. WSW of Neufchateau, on the Semoy. Pop. 992. There are extensive slate-quarries here.

**HERBIEIS (Les)**, a canton, commune, and town of France, in the dep. of Vendee, 23 m. NE of Bourbon-Vendee. Pop. of com. 2,826; of cant. 13,142.

**HERBIGNAC**, a canton, town, and commune of France, in the dep. of Loire-Inferieure, arrond. and 17 m. WNW of Savenay. Pop. of com. 3,176; of cant. 8,065.

**HERBLAIN (SAINT)**, a commune and town of France, in the dep. of Loire-Inferieure, 6 m. W of Nantes, near Chatenay. Pop. 2,380.

**HERBLAY**, a commune and village of France, in the dep. of Seine-et-Oise, on the Seine, 9 m. WNW of Paris. Pop. 1,564.

**HERBLON (SAINT)**, a commune and town of France, in the dep. of Loire-Inferieure, cant. and 5 m. NE of Ancenis. Pop. 2,500.

**HERBOLZHEIM**, a town of Baden, in the circle of the Upper Rhine, 14 m. NNW of Freyburg. Pop. 2,057.

**HERBORN**, a town in the duchy of Nassau, on the Dille, 3 m. SSE of Dillenburg, 32 m. NE of Nassau. Pop. 2,267. Here is a celebrated Calvinist high-school, founded in 1584, which has the privileges of a university.

**HERBRANDSTON**, a parish in Pembrokeshire, 3 m. WNW of Milford. Pop. 255.

**HERBRECHTINGEN**, a village of Württemberg, on the Brenz, 5 m. SE of Heidenheim. Pop. 1,524.

**HERBSLEEN**, a town in the duchy of Saxe-Gotha, on the Unstrut, 9 m. NE of Gotha. Pop. 1,480.

**HERBSTSTEIN**, a town of Hesse-Darmstadt, in the principality and 13 m. W of Fulda. Pop. 1,616.

**HERCK**, a town of Belgium, in the prov. of Limburg, situated on a river of the same name, an affluent of the Damer, 23 m. NW of Maestricht. Pop. 1,763.

**HERCOLE**. See **ERCOLE**.

**HERCULANEUM**, an ancient city of Italy, 7 m. ESE of Naples, near the site of the modern Portici. It was destroyed by an eruption of Mount Vesuvius in A. D. 79; and its site had long been a matter of doubtful discussion, as it had been completely buried under volcanic substances to a depth of 70 ft. The neighbouring *Pompeii*, on the river Sarno, one of the most populous and commercial cities of this coast, and *Stabia*, which stood on the site of the modern Gragnano, together with *Oplontia* and *Tegulanum*, experienced the same fate. Earlier excavations at this spot had long been forgotten, when three female statues—now in the Dresden museum—were found in digging a well at Portici. After this discovery, farther excavation was prohibited by the government, and nothing more was thought of the matter till Charles, king of Spain, having taken possession of Naples, chose Portici for his spring-residence in 1738. The well was now dug deeper, and traces of buildings were found. The theatre was the first discovery. In 1750, *Stabia* and *Pompeii* were explored. The latter place, being covered with ashes rather than lava, was more easily examined. In 1759, 1,696 papyrus rolls were discovered in a villa of the buried H. The rolls were of a cylindrical form, and so much charred as to have the appearance of tobacco rolls. Antonio Piaggio invented a simple, but ingenious machine, to unroll the manuscripts, previously strengthened by

gold-beater's skin, by means of silk threads attached to their exterior edge. The uses of this machine were, however, limited; and various other experiments on the manuscripts—which were for the most part not only reduced to a coal, but almost entirely dissolved by the moisture which had penetrated them—afforded no satisfactory results. According to an examination instituted by Sir Humphrey Davy, in Naples, in 1819, 407 of the 1,696 rolls discovered had been unrolled, of which only 88 were found legible; 24 had been sent as presents to foreign princes, and, of the remaining 1,265, only from 80 to 120 were in a state which promised any chance of success, according to the chemical method invented by him. [See *Journal of the Royal Institution*, April 1819.] The authors of the works hitherto discovered are Epicurus, Philodemus, Demetrius, Polystratus, Colotes, Phædrus, Phanias. There have been published *Herculaneum Voluminum quæ supersunt*, Tom. I. and II., Naples, 1793–1809, fol. In 1824, the university of Oxford published *Herculaneum Vell. Partes duæ*, containing fragments from the papyri at Oxford. The antiques discovered in these buried cities are represented in the great work, *Le Antichità d'Ercolano* (Naples, 1757), which, with the *Catalogo degli Antichi Monumenti d'Ercolano*, by Bayardi (1756), comprises 10 fol. vols.

**HERCULANEUM**, a town of Jefferson co., in the state of Missouri, U. S., situated on the Mississippi, at the mouth of the Joachin, half-way between St. Louis and St. Genevieve. The country behind is hilly, but well-timbered. Several mills and shot-factories have been erected in the neighbourhood of this place; and boat-building is carried on here.

**HERDICKE**, or **MARIEN-HERDECKE**, a town of Prussian Westphalia, in the co. of Mark, on the Ruhr, 26 m. W of Arnsberg. Pop. 2,308. It has paper and gunpowder mills.

**HEREFORD**, an ancient city, the capital of the co. of Hereford, in the hund. of Grimswoth, nearly in the centre of the co.; 19 m. N of Monmouth, and 136 m. WNW of London. It stands on a gentle eminence sloping from the N bank of the Wye, in the midst of luxuriant scenery, and surrounded by a highly cultivated champaign country. A bridge of 6 arches here crosses the Wye. The streets in general are broad and straight; and the town is neat and cheerful in appearance. The principal and public edifices,—besides the cathedral and bishop's palace, and the churches, chapels, schools, and infirmary,—are the county-hall, a handsome building forming one side of the open space called the High-town, erected in 1817, after a plan by Sir Robert Smirke, and containing two well-arranged court-halls; the county-jail and house-of-correction, a spacious structure enclosed within a high brick wall, built in 1797, on Howard's plan; the old town-hall; and the theatre, a neat modern building, claiming notice from the circumstance of its having nurtured the histrionic genius of a Clive, a Siddons, and a Kemble. The income of the borough in 1839 was £2,886; in 1848, £3,464. Amongst the ancient privileges of H. was that of returning 2 members to parliament,—a privilege which it still retains. The number of electors registered in 1837 was 909; in 1848, 1,002. H. is the principal place of election for the co. members.—This city has never been of any note for manufactures, excepting that of gloves, which was long tolerably flourishing. There are manufactories of hats, leather, earthenware, ropes, cutlery, and other iron-work, in and near the city, and some ale and porter breweries. Six fairs, besides the bishop's fair, are held at H. in the year. They are all of more or less importance to the city, but the October fair is the largest. The pop. of the city in 1801 was 6,828; in 1831, 10,280; in 1841, 10,921; in 1851, 11,156.

*Diocese, &c.* H. is one of the most ancient bishoprics in England. This dio. consists of the archdeaconries of H. and Salop, in the prov. of Canterbury. The number of benefices in this dio. returned to the commissioners in 1831, inclusive of sinecure rectories, but exclusive of benefices annexed to other preferments, was 321, besides 7 not returned. The average gross income of incumbents in the 321 returned benefices was £221. The total number of curates was 159; average stipends, £81. The total amount of the average gross yearly income of the see for 3 years ending 31st December 1831, was £3,090; net yearly income, £2,516. By order in council of date 21st August 1837, the eccle-

statistical commissioners are empowered to raise the average annual income to the sum of £24,200. The average net yearly income of the dean and chapter, or corporation of the cathedral, during the 3 years ending 1831, was £3,544. The corporation consists of the dean and 5 residentiary prebendaries, besides a precentor and 22 prebendaries. There is also a college of vicars forming a corporate body, with an average net yearly income of £986.—The cathedral, built about the year 1280, stands on the S side of the city. It is a cruciform building, with a small transept towards the E. and a chapel beyond it dedicated to the Virgin. From the intersection of the nave and transept, rises a square tower which had formerly a spire upon it, cased with lead, and rising 92 ft. in height above the battlements; but this was pulled down in order to relieve the arches of the tower from so much superincumbent weight. The general dimensions of the cathedral are as follows:—Extreme length, 325 ft.; from the W door to the choir, 130 ft.; length of the choir, 96 ft.; from the choir to the library door, 24 ft.; length of the library, 75 ft.; extent of the great transept, 100 ft.; breadth of the nave and side aisles, 74 ft.; breadth of the nave, 38 ft.; height of the body of the church, 91 ft.; height from the area to the vaulting, 70 ft. The exterior is very dissimilar in its parts, and has lost much of its original design, but the interior is still very attractive. Almost all the buildings dependent on the cathedral are situated on its S side. The bishop's cloisters, which form the communication between the cathedral and the palace, enclose an area of about 100 ft. square, appropriated to the purposes of sepulture. The bishop's palace is an ancient building, pleasantly situated at a little distance from the banks of the Wye.—The antiquity of H. is very remote. It became the capital of the Mercian kingdom, and acquired additional importance from the building of the cathedral, and the advantages to the city derived from the visits of multitudes to the tomb of Ethelbert. H. was repeatedly the seat of hostilities in the disputes between the houses of York and Lancaster, in which the castle was much injured. The city also suffered much during the civil war. The Devereaux family receive the title of Viscount of this city.

**HEREFORD**, a township of Lower Canada, in the co. of Sherbrooke, extending N from the boundary-line. It has a generally hilly surface, and is well-watered by several branches of the Connecticut, and by several lakes, all of which abound with excellent fish. Its soil is generally good, and is to a great extent under cultivation. Pop. 160. It contains a mountain of the same name.—Also a township of Berks co., in the state of Pennsylvania, U. S., 80 m. E of Harrisburg, bounded on the NE by Shoub's mountain, and watered by the main and W branches of Perkiomen creek. Pop. in 1840, 1,235.

**HEREFORD (LITTLE)**, a parish in Herefordshire, 7 m. NNE of Leominster, on the river Teme, intersected by the post-road from Ludlow to Tenbury. Area 3,550 acres. Pop. in 1831, 477; in 1851, 493.

**HEREFORDSHIRE**, an inland county of England; bounded by Salop on the N; Worcestershire on the NE and E; Gloucestershire on the SE; Monmouthshire, from which it is separated by the river Monnow, on the SW; Brecknockshire on the W; and Radnorshire on the NE. Its form is nearly an ellipsis; but some detached parishes are situated beyond the general outline. The greatest extent of the co. from Ludford on the N, to the opposite border, near Monmouth on the S, is 38 m.; its greatest width from Clifford on the W to Cradley on the E, is 35 m. Its circumf. is 180 m.; area, 860 sq. m., or 550,400 acres.

*Physical features.* The surface of this co. is undulating, and the valleys occasionally stretch into plains. The elevations do not rise to a great height, but are sufficiently high to afford the ground-work of a pleasing diversity of scenery. The highest land within the limits of the co. is the Hatterel range of the Black mountains which borders it on the WSW. The prospects from these hills are peculiarly pleasing, as are those from the Malvern hills, which constitute the highest land on the E. Through the SE quarter a range of hills extends from the Lea NE towards Stoke-Edith. The most conspicuous hills in the N are those in the hund. of Wigmore near Downton, Leintwardine and Ludlow, with the chain running SW towards Kington, and through the hund. of Huntington to Brilley mountain. A peculiar and important feature in the aspect of the co. is seen in the two chains of hills running parallel with the Hat-

terel range, one beginning at Mynydd-Ferdinn, and terminating at the Vagar hill; the other a lower, lengthened, narrow ridge or chain, running from Monington-stradle to Middlewood, and forming the NE boundary of 'the Golden vale,' a rich and fertile tract of low land watered by the river Doyer. The general aspect of this co. is extremely rich. Exclusive of the orchard-like appearance which its fruit-trees and hop-gardens give it, it may properly be termed a woodland co. The sides and summits of the hills and upland grounds are often covered with extensive coppice-wood plantations; and alder coppices are plentiful in low and marshy situations. H., moreover, is almost all enclosed; and as most of the enclosures have been fenced with hedge-rows, the co., from this cause independently of others, has a woody, sylvan aspect. The romantic beauties of the rapid and majestic Wye have furnished many subjects for the poet and the painter; and the scenery displayed in river excursions from Hereford to Chepstow, is acknowledged to be unrivalled by that on any other stream in England.

*Rivers.* The Wye, the Lugg, the Arrow, and the Frome, together with the Monnow and the Teme, are the larger rivers in this co.; but the two latter can scarce be claimed as H. streams at all. The Wye enters H. from the Hay in Brecon, and flows to Hereford, through a level but pleasant country. It is navigable by barges of from 18 to 40 tons up to Hereford, and for smaller craft to Hay, but the navigation is often interrupted either by a scarcity of water during greater part of every dry summer, or by the force of its stream when swelled by the mountain-torrents during winter. The Lugg enters this co. on the NW near Stapelton-castle, and flowing SE and S, receives the Pinsley near Leominster, and joins the Wye near Mordiford. Like the Wye, it is subject to sudden overflow, and is frequently swelled by partial rains. It is navigated to Lugwardine bridge. The Arrow, which has its source in Radnorshire, flows by Kington, Eardisland, and Monkland, to the Lugg. The Frome originates in the NE quarter of the co., and running by Bromyard, Bishop's-Frome, Castle-Frome, and Canon-Frome, and being joined by the Loden near Stretton-Grandison, falls into the Lugg a little above Mordiford. The Ledden and the Doyer are the largest of the other streams which intersect this co.—Some medicinal springs rise on the Hereford side of the Malvern-hills. Petrifying springs are met with in the neighbourhood of Moccas, Fownhope, Wormsley, Clanrothel, and other hilly parts of the co. where the soil is calcareous.

*Canals, roads, and railroads.* Attempts have been made to increase the inland navigation of this co. to some extent, by the partial introduction of canals. In 1796, a canal, extending 20 m. between Leominster and the Mable coal works in Worcestershire, was completed; and in the following year, other 8 m., forming the entrance of this line into the Severn, was opened. This canal passes through two tunnels, extending together to 3,975 yds., between Mable and Stourport.—The H. and Gloucester canal was cut from Gloucester to Ledbury in 1798; and in 1839 the work was resumed. [See **GLoucestershire**.] According to the original plan, this canal proceeds from Ledbury to Hereford, by Canon-Frome, near which it passes through a tunnel, and afterwards crosses the Frome; it then runs W to the Lugg, which it also crosses, and then passing through another tunnel, terminates at Hereford.—The principal roads radiate from Hereford to Abergavenny and Newport; to Bristol and Bath by Monmouth; to Gloucester by Ross and by Ledbury; to Worcester by Castle-Frome; to Kidderminster, Birmingham, &c., by Bromyard; and to Leominster, whence, as well as from Hereford direct, roads leave the co. by Tenbury, Ludlow, Presteigne, Kington, and Hay. Not many years ago the roads of H. were proverbially bad. The returns of turnpike trusts for 1836 show a total expenditure of £27,031 8s. 6d. by 14 turnpike trusts in this co.; and the highway returns for 1839, an expenditure of £13,138 on 1,374 m. of road.—The Hay railway, for which an act was passed in 1811, runs in a circuitous course of 24 m. through a mountainous district, betwixt the wharf of the Brecon and Abergavenny canal, near Brecon, and the v. of Parton-cross, passing by Hay. The Kington



joins the Hay railroad at Parton-cross, and is carried by Almeley and Kington, to the lime-works near Burlingob in Radnorshire. This railroad is about 14 m. in length. It is also employed for the conveyance of coal, iron, lime, and agricultural products. The Hereford and Abergavenny railroad, or line of railroads separately termed the Hereford, Grosmont, and Llanfihangel railroads, pass from Hereford by Pontrilas, Llangue, Grosmont, and the rivers Monnow and Honthy, and running along by Llanfihangel-cru-gorney-court and Abergavenny, terminate at the Monmouthshire and Brecon canal. The nearest locomotive lines of railway are the Bristol and Gloucester, and the Gloucester and Birmingham.

*Strata, soil, &c.*] The prevailing subsoil in this co. is the old red sandstone formation, except in a few detached parts, especially on the W, where it is limestone. Among the mineral productions are red and yellow ochres, pipe-clay, and fuller's earth. Iron-ore occurs on the borders of Gloucestershire, but not in profitable quantities, although it has been thought that iron-works were established here as early as the Roman times. Deep beds of gravel are occasionally met with in the vicinity of Hereford, and the subsoil of several of the hills is of siliceous grit. The general character of the soil is argillaceous earth, or deep and heavy red loam, with a mixture of marl and calcareous matter, and in some districts a substratum of clay; in others of gravel.

*Produce.*] This co. is chiefly distinguished for its wool, wood, wheat, hops, cider, and perry. The usual rotation of crops is wheat, turnips, barley, clover, wheat, and pease or vetches. Wheat is most plentifully produced about the central parts of the co., and between Hereford and Ledbury. Oats are chiefly raised on the high grounds both on the W and E sides of the co., and barley in the vicinity of Ross. The wheat of the H. vales, and the barley of its high grounds, are considered equal to the best in England. The cultivation of hops forms a considerable branch of the rural economy of H. The plant cultivated for use—the *Lupulus femina*, or female hop—was introduced to England from the Netherlands in 1524. In 1528 a petition was presented to parliament against the use of it, wherein it is styled “a most pernicious and wicked weed.” The partiality of the English for their native wormwood, however, by degrees gave way; and if the hop was thought at first to communicate a disagreeable and nauseous taste, the palate of the country soon became so reconciled to the exchange, that in 50 years thereafter, hops had gained the entire protection of the legislature. At what time they were first planted in H. cannot be clearly ascertained; but in 1656 they are said to have made extensive progress in the co., the Herefordshire farmers aiming “to be the chief hop-planters in England.” From a parliamentary return, we find that in 175 Herefordshire parishes, the average annual number of acres occupied as hop-yards, exclusive of several parishes from which the returns could not be ascertained, during 7 years ending in 1835, was 11,978; the average of hops annually charged 2,022,092 lbs.; the average annual amount of duty £16,961 5s. 3d.—H. is even more generally celebrated for its cider than its other vegetable produce. Orchards abound in every quarter of the county. Various sorts of apples, yielding liquors of different strength and flavour, are grown. Amongst the old sorts is the styre apple, which is almost peculiar to this district of England, and has long stood first in general estimation, being remarkable for producing cider of unusual flavour, strength, and body. The hagloe-crab and the golden-pippin were next in esteem at the time when Marshall wrote his observations on the management of orchards and fruit liquor in H. The old red streak was brought into repute by Lord Scudamore, and has been considered peculiar to this co. The colours of good cider fruits are red and yellow: green is avoided as affording liquor of the harshest and generally of the poorest

quality. The annual produce of the orchards greatly varies. In some years, 20 hhd.s. of cider have been made from the produce of a single acre of orchard-ground; but the more usual average from trees in good condition is 12 hhd.s. an acre. The labour of picking a sufficiency of apples and converting them into a hhd. or 110 gals. of cider, has been estimated at from 4 to 7 s. A hhd. is sold at from 3d. to 2s. per gal., according to the quality and the abundance of crop; in ordinary years the price varies from 4d. to 1s. 2d. per gal. The quantity of cider made in a favourable year in this co. cannot be exactly ascertained, but it has been estimated at no less than 20,000 hhd.s. The orchards are of various sizes: from 4 or 5, to 30 or 40 acres.—The H. cattle are held in estimation by the best informed judges; but excepting the production of cheese for home consumption or the Hereford market, dairy-farming is never practised here. The breed of sheep has long been celebrated amongst wool-growers. Their fleece is famed for the silkiness of its pile, and the delicacy of its texture. The stock of sheep in the co. is very large, being estimated at about 500,000 head; and the quantity of wool now annually brought to market is rated at about 8,300 packs.—Horses of good quality are extensively bred in this county for agricultural purposes; and the riding and coach-horses of the northern districts are highly bred, compact, and active.

*Climate and vital statistics.*] With the exception of the north riding of Yorkshire, more females, and, with the exception of Durham,—adjoining to the north riding,—and the north riding itself,—more males, live to the age of 80 and 90 years in this co. than in any other throughout all England and Wales. From parliamentary returns we find that in 1837 the rate per cent. of pauper lunatics and idiots on the whole pop. of 1831 in H. was '17, the average for England being '10, and for Wales '12. The number of lunatics was 61; of idiots, 132. In another table the proportion of the same numbers to the pop. are stated as  $\frac{1}{17}$ , while the proportion for all England is  $\frac{1}{155}$ .

*Manufactures, trade, &c.*] H. has no manufactures of any great importance, excepting the semi-agricultural branches of cider and perry making. Some coarse woollens are made in a few places. Woollens and linsey fabrics are still manufactured to a small extent in Hereford; and coarse linseys and check horse-collaring are made at Leominster, where also leather gloves and hats are made; rope and sacking is made at Ledbury; and at Kington, iron, nails, and gloves. Oak timber and oak-bark are important articles of export; these, with hops, cider, wheat, and other agricultural produce, are the principal articles of trade.

*Divisions, Statistics, &c.*] This co. comprises the hundreds of Wormelov, Webtree, Ewyas-Lacy, and part of Huntington, to the SW of the river Wye; and, to the NE, the remainder of Huntington, with Stretford, Grimsworth, Greytree, Radlow, Broxash, Wolphy, and Wigmore; in all 11 hundreds. It comprises 221 parishes; 1 city, Hereford; 2 boroughs, Hereford and Leominster; 7 market-towns, Hereford, Leominster, Weobly, Ross, Ledbury, Kington, and Bromyard. Pop. in 1801, 75,260; in 1821, 87,643; in 1841, 96,515; in 1851, 99,112. The rate of increase per cent. in 50 years from 1801 to 1851, has been 31·69; the annual rate of increase per cent. 0·55.—This co. is comprehended in the diocese of Hereford, with the exception of the parishes of Clodock, Dulas, Ewyas—Harold Llandillo, Michaelchurch-Escle, Rowstone, St. Margaret's, and Walterstone, and the chapelry of Craswell, Long-town, and Llanwinno, which are all in the dioc. of St. Da-



vid's. The dio. of Hereford is in the ecclesiastical province of Canterbury, and the co. forms an archd. comprising the 7 deaneries of Frome, H., Irchingfield or Archenfield, Leominster, Ross, Weobley, and Weston. Of about 220 parishes in the archdeaconry, 50 are perpetual curacies, and the remainder consist of an equal number of rectories and vicarages.—The poor rate returns for 3 years to Easter 1750, show an average expenditure of £5,056 on the poor of this co.; for 1803, of £48,067; for 1832, of £63,468; for 1839, of £41,100; for 1847, of £45,363, being at the rate of 1s. 3½d. per pound on the annual value of property rated to poor rates, viz. £699,529.—The total number of savings banks in the co. in 1838 was 6; of depositors, 6,325; amount deposited, £162,880; average amount invested by each depositor, £26. In 1848, the number of savings banks was 6; of depositors, 8,998; amount deposited, £215,962; average amount of deposits, £24.—The total number of charities in H. in 1836, was 730, and their aggregate annual income, £13,153.—This co. returns 3 members to parliament, who are polled for at Hereford, Leominster, Bromyard, Ledbury, Ross, and Kington, the principal place of election being at Hereford. The number of electors registered for the county in 1837 was 7,216; in 1848, 7,371.—H. is comprehended in the Oxford circuit. The assizes and quarter-sessions are held at Hereford. The number of criminals to every 100,000 of the pop. being for all England, in 1801, 54, the proportion for this co. was in that year, 34; in 1830–2, 136, that for all England being 146; and in 1848, 232, that for all England being 177.

HEREM, a fortress of Syria, in the pash. and 40 m. W of Aleppo, in the territory and 20 m. E of Antakia.

HERENCHUN, a town of Spain, in the prov. of Alava, partido and 6 m. WSW of Salvatierra, and 13 m. E of Alava, in a plain. It is divided into 2 parts, one named Herenchun, and the other Aonza or Abaunza. Pop. 208.

HERENCIA, a town of Spain, in New Castile, in the prov. and 42 m. NE of Ciudad Real, partido of Alcazar-de-San-Juan, in a plain near the r. bank of the Giguela. Pop. 6,400. It has a parish church and a convent; and contains extensive manufactories of soap. A weekly market for grain is held here.

HERENCIAS, a town of Spain, in New Castile, in the prov. and 50 m. W of Toledo, partido and 9 m. SSW of Talavera-de-la-Reina, in a plain, 3 m. from the Tagus. Pop. 896.

HERENS, a dizein of Switzerland, in the cant. of the Valais. It comprises the valley of the same name, called in German Eringer-thal, and several communes. This valley extends N from the l. bank of the Rhône, a little above Sion, to the Col-d'Oren, in the Pennine Alps, a distance of 24 m. The Borgne, by which it is watered in its entire extent, takes its rise in the glaciers of Tourmenté, at the Col-d'Oren. It possesses considerable fertility, but has little cultivation.—The dizein contains 8 parishes, and 6,320 inhabitants, of whom more than half dwell in the valley. Its cap. is Hermence.

HERENT, a department and commune of Belgium, in the prov. of South Brabant, arrond. and 2 m. NW of Louvain. Pop. of dep. 2,362; of village, 1,554. It has several breweries, an oil-mill, and a gin-distillery.—Also a commune in the prov. of Limburg, dep. of Nierpelt. Pop. 200.

HERENTHALS, a department, commune, and town of Belgium, in the prov. of Antwerp, arrond. of Turnhout. Pop. of dep. 3,300. The town is 20 m. E of Antwerp, and 13 m. SSW of Turnhout, on the l. bank of the Little Nethe. Pop. 2,470. It has manufactories of common woollen fabrics, lace, cord-

age, and leather, and several distilleries. This town is of great antiquity, and was originally named St. Vaudru. It was surrounded by walls and ditches, and erected into a town, in 1209, by Henry I., duke of Brabant.

HERENTHOUT, a department and commune of Belgium, in the prov. and 18 m. ESE of Antwerp, arrond. of Turnhout, 5 m. WSW of Herenthals, on the Great Nethe. Pop. 2,290. It has several distilleries of gin and manufactories of cloth, and carries on an active trade in butter.

HEREPIAN, a village of France, in the dep. of the Herault, cant. and 6 m. SE of St. Gervais, near the r. bank of the Orbe. Pop. 643. Fairs for cattle, sheep, salted meat, stuffs, pottery, &c.

HERFFELINGEN, a department and commune of Belgium, in the prov. of S. Brabant. Pop. 1,729.

HERFOLGE, a parish of Denmark, in the diocese and island of Sieland, bail. and 23 m. NNE of Præstøe, and 21 m. SW of Copenhagen. It contains 2 hospitals, and the abbey of Valløe, founded by Queen Sophia Madelene in 1737.

HERFORD, or HERFORDEN, a town of Prussia, in the prov. of Westphalia, capital of a circle of the same name, in the regency and 18 m. SW of Minden, on the Aa, at the confluence of the Werra. Pop. in 1846, 5,550. It was formerly fortified, but its only defence now is a wall, its ramparts having been converted into public walks. It is divided into an old and new town, and has a suburb. The houses are built in the old Westphalian style of architecture. It contains 3 public squares, 1 Catholic and 5 Protestant churches, 5 schools, a gymnasium, a museum, a large prison and an arsenal, and had formerly an imperial abbey. The manufacture of leather, tobacco, oil, calico and linen, and cotton spinning, form the chief branches of local industry. Pop. of circle, 22,325.

HERGEST, or MOTTONAITI ISLANDS, a group of islands in the Marquesas, or Mendana archipelago, in the S. Pacific, WNW of Noukahiva island, in S lat. 8° 40', and W long. 140° 25'. They take their name from the English mariner by whom they were discovered.

HERGESTS-BOTH, a township in the p. of Kington, Herefordshire.

HERGIBETTE (L'), a commune of Belgium, in the prov. of Hainault, dep. of Arc-Ainières. Pop. 230.

HERGINES, a commune of France, in the dep. of the Nord, cant. and 4 m. WNW of Condé-sur-l'Escaut, on the r. bank of the Schelde. Pop. 2,213. It has extensive coal-mines and brick-kilns, and manufactories of woollen hosiery.

HERGISDORF, a village of Prussia, in the prov. of Saxony, in the regency of Merseburg, W of Eis-leben.

HERGISWEIL, a town of Switzerland, in the cant. of Luzern, SW of Willisau. Pop. 2,181.

HERGULJUELA-DE-LA-SIERRA (LA), a town of Spain, in the prov. and 66 m. SSW of Salamanca, partido of Sequeros-del-Condado, in a mountainous and infertile district. Pop. 800, of whom a large majority are muleteers. Honey forms the chief article of local produce.

HERHET, a commune of Belgium, in the prov. of Namur, dep. of Houyett. Pop. 120.

HERHOUT, a commune of Belgium, in the prov. of South Brabant, dep. of Thollembeek. Pop. 418.

HERIAMONT, a commune of Belgium, in the prov. of Hainault, dep. of Pont-à-Celles. Pop. 104.

HERIC, a commune and town of France, in the dep. of the Loire-Inferieure, cant. and 8 m. WSW of Nord. Pop. in 1841, 3,927.

HERICOURT, a canton, commune, and town of France, in the dep. of the Haute-Saône, arrond. of

Lure. The cant. comprises 26 com. Pop. in 1831, 13,243; in 1841, 14,665. The town is 15 m. SE of Lure, on the l. bank of the Lizène. Pop. 2,907. It has an old castle, and a Protestant consistorial church, and possesses extensive manufactories of hosiery, chintzes, linen, and pottery, several cotton-spinning mills and tanneries, and numerous dye-works. Fairs for ironmongery, straw-hats, cattle, &c., are held here monthly.

HERIMONCOURT, a village of France, in the dep. of the Doubs, cant. and 5 m. NNE of Blamont. Pop. 501. It has a cotton-spinning mill, several tanneries and dye-works, and extensive manufactories of iron and steel ware.

HERING, a town of the duchy of Hesse-Darmstadt, in the prov. of Starkenburg, district of Dieburg, 14 m. ESE of Darmstadt, at the foot of Mount Otzberg, which is surmounted by a fort. Pop. 478, of whom 153 are Catholics.

HERINGEN, a town of Hesse-Cassel, in the prov. of Fulda, circle and 8 m. E of Hersfeld, on the r. bank of the Werra. Pop. 1,224.—Also a town of Prussia, in the prov. of Saxony, regency and 51 m. W of Merseburg, circle and 18 m. W of Sangerhausen, on the r. bank of the Helme. Pop. 2,120. It has a castle.

HERINNES, a department and commune of Belgium, in the prov. of Brabant, arrond. of Brussels. Pop. of dep. 4,211. The village is 18 m. SW of Brussels, near the Marcq. Pop. 3,040. It has several breweries and distilleries of gin.—Also a dep. and commune in the prov. of Hainault, arrond. of Tournai. Pop. of dep. 2,032. The village is 10 m. N of Tournai, on the r. bank of the Schelde.

HERIOT, a parish of Mid-Lothian, on a stream of the same name, which is joined by the Gala at Halltree. Area 23½ sq. m. Pop. in 1851, 352.

HERIRUD, ROOD-MALAN, or HURY RIVER. See HERAT.

HERISAU, a town of Switzerland, capital of the district of Appenzell-Ausser-Rhoden, and of the division Hinter-der-Sitter, 5 m. SW of St. Gallen, and 9 m. WSW of Trogen, on the Glatt, a small affluent of the Sitter, at an alt. of 2,493 ft. above sea-level. Pop. (Protestant) 2,500; and including the com. 7,150. It has a court-house, an arsenal, an ancient church-tower in which the archives of the district are kept, a court-house, a savings'-bank, a large public library, 2 printing-establishments, and an orphan's asylum; and possesses extensive manufactories of fine muslin, varieties of cotton fabrics, printed muslins and tulle, numerous dye-works and bleacheries, paper and saw mills, and several tanneries. Fairs are held here 4 times a-year. On the summit of adjacent heights are the ruins of the castles of Urstein, Rosenberg, and Schwanberg, and at the distance of about 3 m. are the celebrated sulphureous baths of Heinrichsbad. This town appears to have been known to the Romans, and its church-tower is supposed to have been a Roman erection. It is also said to have been the first place in Switzerland in which Christianity was embraced.

HERISSON, a canton, commune, and town of France, in the dep. of the Allier, arrond. of Montluçon. The cant. comprises 18 com. Pop. in 1831, 11,855; in 1841, 11,922. The town is 14 m. NNE of Montluçon, and 31 m. WSW of Moulins, on the Omance. Pop. 1,407. It is surrounded by an old wall, now in ruins, and commanded by a castle also much dilapidated. Quills form its chief article of trade. Cattle fairs are held here 6 times a-year.

HERISTAL. See HERSTAL.

HERJAS. See ELJAS.

HERJE, or HERJE-AN, a river of Sweden, in the län or prefecture of Jamtland, which issues from the

mountains which separate the haerad of Herjedalen, from the prefecture of Jamtland. It derives its name from the Herje-an, which flows through it in the SE; in the W it is covered by the range of the Kölen-Mölen and its ramifications. It is well-wooded, and has a fertile soil, but possesses little cultivation. The rearing of cattle and manufacture of cheese form the chief branches of local industry. Although this district comprises an area of 840 m., its pop. does not exceed 4,000 persons. Its principal village is Hede.

HERJEHAGNA, a mountain of Sweden, in the prefecture of Jamtland, and haerad of Herjedalen, near the confines of Norway. The Sor and the Gor, head-streams of the E and W Dal, take their rise in this mountain.

HERKEYENHOCK, a commune of Belgium, in the prov. of E. Flanders, dep. of Nazareth. Pop. 579.

HERKIMER, a county in the state of New York, U. S., comprising an area of 1,370 sq. m., intersected in the SW by the Adirondack mountains, and, except to the S of the Mohawk, where it is level and very fertile, generally hilly. The Erie canal and the Utica and Schenectady pass through its S part. Iron ore is found here in great abundance, and also in considerable quantities gypsum and lead. Pop. in 1840, 37,477. The capital, which bears the same name, is pleasantly situated on the N side of Mohawk river, 78 m. WNW of Albany. Pop. 800. The township presents, except in the N, a level surface. It is bordered on the S by the Mohawk, the alluvial flats of which are extremely productive, and intersected by West Canada creek. Pop. 2,369.

HERKLA, or HERKLLA, a ruined town situated on the E coast of Tunis, on a promontory stretching into the gulf of Hammamet, 57 m. SE of Tunis. Dr. Shaw supposes it to mark the site of the *Adrumetum* of the earlier ages, the *Justiniana* of the middle, and the *Heraclea* of the lower empire. It appears to have been about 1 m. in circuit; but the ruins, though considerable, did not appear to Shaw so extensive as might have been expected.

HERKE. See HERCK.

HERKENBOSCH, a town of Dutch Limburg, 5 m. SSE of Ruremonde. Pop. 1,231.

HERLEN. See HEERLEN.

HERLISHEIM, a town of France, in the dep. of Bas-Rhin, cant. and 4 m. SE of Bischweiler, on the r. bank of the Zorn. Pop. 1,943.—Also a town in the dep. of Haut-Rhin, on the Lauch, 5 m. S of Colmar. Pop. 1,260.

HERLUFSHOLM, a parish and village of Denmark, in the island of Sieland, bail. of Sorø, 27 m. ESE of Corsoer.

HERM, a small island within 2½ m. of Guernsey, sheltering the roadstead of St. Peter's-port. Its length, from N to S, is about 1½ m.; its breadth half-a-mile. Pop. in 1831, 177; in 1841, only 38, a decrease attributed to the stoppage of granite quarries in the island. The shores afford abundance of sea-weed for manure. The shell-beach, as it is called, is composed exclusively of shells. Gneiss and granite constitute the basis of the island. Large quarries of granite are wrought on this island; and several hundreds of acres under potatoes and corn. Wild rabbits are numerous. There is a small harbour near the granite quarries.

HERM (L'), a commune and village of France, in the dep. of Haute-Garonne, cant. of Muret. Pop. 1,135.

**HEEMAGOR**, or **ERMACHOR** (SAINT), a small town of Carinthia, 11 m. S of Saxenburg, on the r. bank of the Gostribach. There are copper-mines in the neighbourhood.

**HERMANCE**, a small town of Switzerland, in the cant. and on the lake of Geneva, 7 m. NNE of Geneva. Pop. 280. It was a fortified town in the early ages; but was burnt by the Bernese in the 16th cent.

**HERMANMIESTETZ**, a large village of Bohemia, in the circle and 4 m. W of Chrudim, on the Goldenbach. Pop. 2,565. Marble and gypsum are quarried in the vicinity.

**HERMANNSTADT** [HUNGARIAN, *Szebeni Szek*], an administrative prov. of Transylvania, composed of various isolated territories in the Saxon-land, lying within the basin of the Aluta, an affluent of the Danube. It is a mountainous territory, being traversed by the Carpathians. The only extensive plain is that in which the cap., which gives name to the district, stands. It has an area of 37 German, or 785 English sq. m. The pop. in 1837 was 114,785. Grain, wine, and fruit, are the chief productions. Cattle, honey, and wax, are exported.

**HERMANNSTADT**, or **NAGY-SZEBEN**, the *Cibinnum* or *Hermanopolis* of the middle ages, a large town of Transylvania, of which it was formerly and has been recently re-appointed the capital. It stands on the river Szeben, or Zibin, in N lat. 45° 47', E long. 24° 9', in a beautiful plain, surrounded on three sides by pleasant elevations, and on the S by the mountains of Fogaras. The plain itself is 1,300 ft. above sea-level; and the higher peaks of the Carpathians that overlook it, about 8,000 ft.; the Ventura Bufaria having an alt. of 7,953 ft., and the Negoi of 8,040 ft. It contained, in 1838, 18,337 inhabitants. Its streets are narrow, crooked, and badly paved; and there are few modern houses in the place. It is the chief town of the Saxon settlers in Transylvania, the place of deposit for their archives, and the seat of some establishments for the education of Protestants. It has also a convent and three monasteries, one of which belongs to the Greek monks of St. Basil. The principal square is large, and pretty regular, and contains a fine statue and a fountain. The other remarkable objects are the orphan-hospital, the barracks outside of the town, the theatre, and the palace of the Bruckenthal family. The last contains a library of 13,000 vols., and a valuable collection of pictures, antiquities, and natural history. The manufactures chiefly consist of woollens, cottons, felt, hats, leather, and soap. The town is still fortified, being surrounded by a mound and ditch; but a portion of its walls and towers have been taken down. It suffered by the removal, about 1790, of the seat of the government of Transylvania to Clausenburg; but if recent ordinances are carried into execution, the chief seat of government for Transylvania will be again transferred to H., which will become the residence of the *Statthalter*.

**HERMANOS**, a small river of Buenos Ayres, which enters the Parana, on the r. bank, 25 m. above San Pedro.

**HERMANOS** (DOS), two islands in the entrance of Lyell sound, in the strait of Magelhaens, bearing S 48° W 5½ m., from Cape Froward.

**HERMANOS** (DOS), two small islands in the Philippine group, near the W coast of Luzon, in N lat. 15° 48'.

**HERMANOS** (LOS), seven islets off the coast of Venezuela, 40 m. N of the Morro of Roldar, and stretching 7 m. NNW. See also **BROTHERS**.

**HERMANN'S KRAAL**, or **FORT BRUNN**, a military post and village in S. Africa, 18 m. NE of

Graham's Town, situated on a rising ground close to the Great Fish river, and surrounded on every side by bare rocky hills of slight elevation. The soil along the river affords excellent pasturage, but is either thickly covered with bush or entirely naked and barren at some distance from the river.

**HERMANSTHAL**, a village of Prussia, in the reg. of Stettin, circle of Cammin. Pop. 310.

**HERMATRA**, one of the smaller Hebrides, a little to the NE of N. Uist.

**HERMENAULT** (L'), a canton, commune, and town of France, in the dep. of Vendee, 8 m. NW of Fontenay-le-Comte. Pop. of com., 900; of cant., 11,678.

**HERMENT**, a canton and commune of France, in the dep. of Puy-de-Dome, arrond. of Clermont-Ferrand. Pop. of cant., 3,816; of com., 564.

**HERMERODE**, a village of Prussia, in the reg. of Frankfurt, circle of Mansfeld. Pop. 188.

**HERMERSDORF**, a village of Prussia, in the reg. of Merseburg, circle of Lebus. Pop. 312.

**HERMERSWEILER**, a village of France, in the dep. of Bas-Rhin, cant. and 7 m. WNW of Seltz. Pop. 218.

**HERMIES**, a commune of France, in the dep. of Pas-de-Calais, cant. of Bertincourt. Pop. 2,301.

**HERMINE** (SAINTE), a commune and canton of France, in the dep. of Vendee, 12 m. W of Fontenay-le-Comte. Pop. of com. 1,823; of cant. 11,886.

**HERMIONE**, or **CASTRI**, a village of Greece, in the prov. of Argolis, near the ancient promontory of H. Pop. between 700 and 800.

**HERMITAGE**, a vineyard of France, in the dep. of Rhone, arrond. and 12 m. N of Valence, on the r. bank of the Rhone. It has an area of about 300 acres. The noted wine called 'Hermitage,' both red and white, takes its name from this place; and is grown here to the annual extent of 2,500 hectolitres.

**HERMITAGE**, a river of Scotland, in the co. of Roxburgh, which, after a course of 10 m. through a fertile country, falls into the Liddel, 1½ m. above Castletown.—Also a parish in Dorsetshire, 6 m. SSE of Sherborne. Area 751 acres. Pop. 139.

**HERMITAGE** (L'), a village of France, in the dep. of Ille-et-Vilaine, cant. and 5 m. NE of Mor-delles. Pop. 445.

**HERMITE ISLAND**, one of the Montebello group, off the W coast of Australia, in S lat. 20° 27', and 0° 8' 23" W of Swan river.

**HERMITES** (LES), a small group in the Pacific, to the NW of the Admiralty isles, in S lat. 1° 28' 30".

**HERMITE'S ISLANDS**, a group of islands of unequal extent, situated at the S extremity of Tierra-del-Fuego, so called from Jacob Hermite, admiral of the Dutch fleet, in 1624. On the southernmost is Cape Horn, in S lat. 55° 58' 41", W long., 67° 10' 53"; but the island which is generally distinguished by navigators as H. island lies about 10 m. NW of the Cape. It is of irregular form, with bold steep shores deeply indented by bays and coves; and surmounted by conical peaks, amongst which Mount Kater attains an alt. of 1,742 ft. above sea-level. Its greatest length from E to W is 12 m.; its breadth, 7 m. Its geological structure is syenitic greenstone resting on granite. Its S. point, Cape Spencer, encloses a crater 200 ft. in depth, the bottom of which is now occupied by a lake. The scenery of the island closely resembles that of many parts of the W of Scotland. The evergreen beech [*Fagus Foresti*] is the most prevalent tree. Ferns and mosses abound.—*Ross and Hooker*.

**HERMOGENES** (SAINT), an island, in the N. Pacific, near the entrance of Cook's channel, in N lat. 58° 13'. It is about 6 leagues in circuit, and is separated from the adjacent coast by a channel 1



league broad. It was discovered by Behring, and farther explored by Cook.

**HERMON**, a township in Penobscot co., in the state of Maine, U. S., 7 m. W of Bangor. Pop. 1,042.—Also a township in St. Lawrence co., New York, 201 m. NNW of Albany. Pop. 1,271.

**HERMON (LITTLE)**, a small range of hills in Syria, on the E side of the great plain of Esdraelon, or 'the valley of Jezreel,' running parallel with the mountains of Gilboa, and 5 m. distant from Mount Tabor.

**HERMON (MOUNT)**, a mountain-chain of Syria, the **JEBEL-ES-SHEIKH** of the Arabs, forming the SE and the loftiest branch of the Anti-Libanus.

**HERMONT**, or **HERMONTIS**, a village of Egypt, between Asfun and Thebes, in a recess about 1 m. from the Nile. The ruins of the ancient *Hermontis* lie between the v. and the hills which skirt the valley of the river. They consist of a temple and a prodigious heap of unburnt brick rubbish.

**HERMONVILLE**, a village of France, in the dep. of Marne, cant. and 9 m. ENE of Fimes.

**HERMOSELLOS**, a small but fortified town of Spain, in the prov. of Leon, at the junction of the Douro and Tormes, 9 m. below Miranda-de-Douro.

**HERMOSILLA**, a village of Spain, in the prov. and 21 m. NE of Burgos, on the Orea. Pop. 180.

**HERMSDORF**, a village of Prussian Silesia, in the circle of Bolkensheim-Landshut, 5 m. S of Landshut.—Also a v. of Silesia, in the circle and 4 m. SSW of Hirschberg, at the foot of the Kynastberg. Pop. 2,000. It has large bleachfields, and a mine of cobalt.—Also a village in the reg. of Breslau, circle of Brzeg. Pop. 235.—Also a v. in the reg. of Breslau, circle of Ohlau. Pop. 353.—Also a v. in the same reg., circle of Waldenburg. Pop. 683.—Also a v. in the reg. of Frankfort, circle of Friedeberg. Pop. 249.—Also a v. in the reg. of Liegnitz, circle of Gollitz. Pop. 564.—Also a v. of Bohemia, in the circle of Königgratz, 24 m. NW of Glatz.

**HERMSDORF (HINTER)**, a village of Saxony, in the circle of Meissen, bail. of Hohenstein.

**HERMSDORF-BEI-BIELITZ**, a village of Prussia, in the reg. of Oppeln, circle of Neisse. Pop. 796.

**HERMSDORF-BEI-LIPSA**, a village of Prussia, in the reg. of Liegnitz, circle of Hoyerswerda. Pop. 266.

**HERMSDORF-BEI-LOHSA**, a village of Prussia, in the reg. of Liegnitz, circle of Hoyerswerda. Pop. 190.

**HERMSDORF-BEI-PRIEBUS**, a village of Prussia, in the reg. of Liegnitz, circle of Sagau. Pop. 292.

**HERMSDORF-BEI-WEIDENAU**, a village of Prussia, in the reg. of Oppeln, circle of Neisse. Pop. 543.

**HERNAD**, a river in the N of Hungary, which rises to the E of Teplicz, near the source of the Waag; flows E by S to Lemes, where it turns S; passes Kaschau; and pursues a S by W and then a S by E course, to the Theiss, which it joins on the r. bank, 18 m. SW of Tokay. Its principal affluents are the Turcze which it receives, on the l., 16 m. below Kaschau; and the Rima, which joins it on the r. at Onod, a little above its confluence with the Theiss. It has a total course of 150 m.

**HERNANI**, a small town of Spain, in Guipuscoa, 3 m. SE of San Sebastian, and 7 m. NE of Tolosa, on the declivity of Mount Santa Barbara, near the Urumea. It consists of two good streets. Pop. 2,555. It has some trade in timber, iron, and linen thread. The British legion were defeated here by the Carlists in 1837.

**HERNE**, a parish and village in Kent, 6½ m. NE by N of Canterbury, near the coast. The p. also

comprises the thriving town of Herne-bay. Area 5,339 acres. Pop. in 1801, 1,232; in 1831, 1,876; in 1851, 3,094. The church is a large, handsome, and ancient structure. The v. of H., or Herne-street, stands near the centre of the p., about 1½ m. from Herne-bay, a modern watering-place, situated on a point of land which juts abruptly out from the line of coast in the Thames' estuary, between Whitstable and Reculver. This latter place is rapidly springing up into an important town, and is regularly visited by steamers, and crowded by fashionable visitors. Its pop. in 1841 was 1,572. The town is built on a gentle elevation, commanding a noble prospect of the ocean, and extends along the shore about 1 m. from E to W. Its distance from Canterbury is about 8½ m., from Margate 15 m., Ramsgate 17 m., and Dover 24 m. The pier forms one of the distinguishing features of the bay. Its length is nearly 3,000 ft. Its head runs parallel with the shore, 400 ft., and forms an efficient break-water from the force of winds and tides. The width of the pier is 24 ft.; and the whole is constructed with great strength and solidity. A parade, 50 ft. wide, and running nearly the whole length of the town facing the sea, is constructed a few feet above the pebbled beach. It is of a firm, gravelly consistence, and furnished with iron balustrades. A clock-tower stands conspicuously fronting the sea adjoining the parade, and about equidistant from the two extremities of the town.

**HERNE-HILL**, a parish in Kent, 3½ m. ESE of Faversham. Area 2,816 acres. Pop. in 1801, 359; in 1831, 507; in 1851, 657. The land is divided into farms varying in extent from 60 to 150 acres, so that the employment of the people is entirely agricultural; and they are by no means destitute of physical comforts; yet it was in this p. that a riot was occasioned in May 1838, by a wretched fanatic calling himself Sir William Courtenay, which was not quelled until several lives were lost.

**HERNIN (SAINT)**, a town of France, in the dep. of Finistere, cant. and 6 m. S of Carhaix. Pop. 1,250.

**HERNEN**, or **HERNÖ**, an island of Sweden, in the gulf of Bothnia, at the embouchure of the Angerman-elf. It is 6 m. in length, and 3 m. in breadth, and is separated by a narrow channel from the main.

**HERNOSAND**, a laen or administrative prov. in the N of Sweden, between the parallels of 62° and 64°, comprising the districts of Angermannland, Jemtland, and Medelpad; and sometimes known as **WESTERN NORRLAND**. Its territorial extent is fully 18,000 sq. m., or two-thirds of the area of Scotland; but so thin is the pop. that in 1839 it was returned at only 85,242. In 1805 it was 59,684. The country is in general covered with wood. One-half of this surface exceeds 320 ft. in elevation above sea-level. It is subdivided into 3 fogderi, and 67 parishes. Its principal towns are H. and Sundsvall.

**HERNÖSAND**, or **HERNOSUND**, the capital of the above government, stands on the W coast of the island of Hernen, in the gulf of Bothnia, in N lat. 62° 38', E long. 17° 59'; and is united to the mainland by a bridge. Its pop. is about 2,500. It has a small provincial college, an establishment for printing books in the Lapp tongue, and a botanical garden. It has a good harbour, and was formerly a staple town; its trade, particularly in linen and Baltic produce, is still considerable. The port was entered in 1849 by 74 vessels = 9,035 lasts, and cleared by 83 = 10,596 lasts, of which 18 were for England. H. is the see of a bishop, and the residence of the provincial magistrates. It has suffered repeatedly from war with the Russians, having been attacked and partly burned by them successively in 1710, 1714, and 1721.



**HERO (NORTH and SOUTH)**, two islands in Lake Champlain. The first, which is 13 m. in length, and 2 m. in breadth, forms a township annexed to Chittenden co., in Vermont, U. S. Area 6,272 acres. Pop. in 1840, 716. South H., belonging to the same co., and separated from North H. by a narrow strait, is 10 m. long, and 5 m. broad, and produces good crops of wheat and other grain. A ferry connects the island with Colchester point, and a sand bar which is fordable on horseback, with Milton in Chittenden co. Pop. 664.

**HEROLDSBERG**, a village of Bavaria, 6 m. ESE of Erlangen. Pop. 360.

**HERON**, a commune and village of Belgium, in the prov. of Liege, cant. of Couthain, 8 m. WNW of Huy. Pop. 1,028.

**HERON ISLES**, a small group in the gulf of Mexico, a little S of the entrance to the bay of Mobile, in N lat. 30° 12'. The channel between them and the main has only 4 ft. water, and is nearly 6 m. in length.

**HERON (LAKE)**, a sheet of water, 15 m. in length, between Island lake and Woody lake, in the course of the Mississippi, or Churchill river, in North America, in N lat. 55° 25'.

**HERPE**, a river of Germany, in Saxony, which rises in the co. of Henneberg, and falls into the Werra, 2 m. N of Meiningen.

**HERQUEGRES**, a commune of Belgium, in the prov. of Hainault, cant. of Franes-lez-Buissenal. Pop. 746.

**HERRADON (EL)**, a town of Spain, in the prov. and 10 m. SE of Avila, on the l. bank of the Gasnatas. Pop. 400.—Also a castle and small port in the prov. of Grenada, 16 m. W of Motril, and 20 m. E of Velez-Malaga. A fleet of galleys, under the command of Juan de Mendoza, was lost here in 1562.

**HERRADURA**, a port of Chili, in S lat. 29° 58' 40'. W long. 71° 25' 45'.

**HERRADURA-DE-CARRISAL**, a port of Chili, in S lat. 28° 05' 45". W long. 71° 15' 45'.

**HERRADURA (POINTE-DE-LA)**, a cape on the coast of Costa-Rica, at the SE extremity of Salinas bay, in N lat. 9° 36'.

**HERRAMELLURI**, a town of Spain, in the prov. of Burgos, 7 m. NW of Santo-Domingo-de-la-Calzada, near the Tiron. Pop. 1,188.

**HERRENALB**, a village of Wurtemberg, in the circle of the Black forest, 18 m. S of Carlsruhe. Pop. 340.

**HERRENBURG**, a small town of Warttemberg, 14 m. SSE of Stuttgart, and 24 m. NE of Freudenstadt. Pop. 2,106.

**HERRENBREITINGEN**, a town of Hesse-Cassel, in the prov. of Fulda, 5 m. WNW of Schmalkalden, on the r. bank of the Werra. Pop. 939.

**HERRENGRUND**, or **URVÖLGY**, a small town of Hungary, 4 m. NNW of Neusohl, situated in a district rich in copper-mines, and inhabited chiefly by miners. Pop. 1,550. Near it is a spring impregnated with sulphate of copper, the most productive perhaps of its kind in Europe. The metal is obtained in the form of an oxide by precipitation with iron in the usual way, and is called 'cement copper.'

**HERRERA**, a town of Spain, in Estremadura, 57 m. W of Caceres. Pop. 950.

**HERRERA-DEL-DUQUE**, a town of Spain, in the prov. of Badajoz, 30 m. E of Villanueva. Pop. 3,697. Excellent wines are made here.

**HERRERA-DE-PISUERGA**, a town of Spain, in the prov. and 39 m. NW of Burgos. Pop. 987.

**HERREROS-DE-SUSO**, a town of Spain, in the prov. and 24 m. NW of Avila. Pop. 350.

**HERRIARD**, a parish in Hampshire, 4½ m. SSE of Basingstoke. Area 2,963 acres. Pop. in 1851, 515.

**HERRIEDEN**, a town of Bavaria, on the l. bank of the Altmühl; 5 m. SW of Anspach. Pop. 1,000.

**HERRIN**, a village of Spain, in the prov. and 30 m. NW of Palencia. Pop. 600.

**HERRINGFLEET**, a parish in Suffolk, 6 m. NW of Lowestoft. Area 1,720 acres. Pop. in 1851, 179.

**HERRINGSWELL**, a parish in Suffolk, 4 m. SSE of Mildenhall. Area 2,540 acres. Pop. in 1851, 225.

**HERRINGTON (EAST and WEST)**, two townships in the p. of Houghton-le-Spring, 4 m. SW of Sunderland. Area of East H. 1,002 acres. Pop. in 1851, 250. Area of West H. 969 acres. Pop. 343.

**HERRLISHEIM**, a commune of France, in the dep. of Haut-Rhin, cant. of Wintzenheim, 4 m. S of Colmar, on the Lauch. Pop. 1,214.—Also a com. in the dep. of Bas-Rhin, cant. of Bischwiller, on the r. bank of the Zorn, 11 m. NE of Strasburg. Pop. 2,100.

**HERRMANNSERFEN**, a village of Bohemia, in the circle of Bidschow, 27 m. N of Königgratz.

**HERRNAH**, a town of Lower Austria, or suburb rather of Vienna, 1½ m. N of Vienna, on the Alser. Pop. 2,950. There is here a seminary, founded in 1775, for the education of the daughters of officers.

**HERRNHUT**, a small town of Saxony, in Upper Lusatia, 6 m. S of Lobau, founded by Count Zindendorf in 1722, for the use of the Moravian brethren. It is a modern-looking town, composed of white houses built in streets crossing at right angles. "All is extremely neat, clean, and profoundly quiet." [Howitt.] Pop. 1,100. Cotton and linen stuffs, stockings, sealing-wax, hats, coloured paper, ribbons, and utensils of copper, brass, and steel, are manufactured here.

**HERRNKRETSCHEN**, a romantic village of Bohemia, on the Elbe, 10 m. SE of Königstein in Saxony. Pop. 500. This place stands on the Saxon frontier, and carries on a great traffic in wood. It belongs to the prince of Clary, and is inhabited by foresters, sawyers, and a few farming-agents of the proprietor.

**HERRNSBAUMGARTEN**, a town of Lower Austria, in the circle of Korneuburg, on the Grotbach. Pop. 1,583.

**HERRY**, a town of France, in the dep. of the Cher, cant. of Sancergues. Pop. 2,124.

**HERSBRUCK**, a small town of Bavaria, in the circle of Middle Franconia, on the Pegnitz, 15 m. E of Nuremberg. Pop. 1,500.

**HERSCHELL (MOUNT)**, a magnificent mountain on the coast of Victoria Land, in S lat. 72° 04'; E long. 170° 08', terminating to seaward in Cape Roget.

**HERSEAUX**, a commune of Belgium, in West Flanders, cant. of Courtrai. Pop. 2,188.

**HERSELT**, a town and commune of Belgium, in the prov. and 24 m. ESE of Antwerp, in the cant. of Wasterloo. Pop. 4,022.

**HERSFELD**, or **HIRSCHFELD**, an administrative subdivision of Hesse-Cassel, in the prov. of Fulda. Area 10.25 German sq. m., or 139,300 acres, of which a little more than one-fourth is under cultivation, and a large proportion under forest. The live stock in the circle in 1840 amounted to 1,770 horses, 4,125 oxen, 7,100 cows, 833,700 sheep. The manufacture of coarse linens is the principal branch of domestic industry. Pop. in 1840, 35,034.—The circle is subdivided into 1 *langericht*, and 2 *zustiz-ants*; and comprises 1 city, 2 towns, and 82 villages.—The cap., which gives name to the circle, is situated on the l. bank of the Fulda, at the confluence of the Haune. It is walled, and is defended by a citadel. It possesses 2 churches, a gymnasium, a polytechnic school, an orphan hospital, and an infirmary. The manufacture of fine woollen cloth is the most important

branch of trade carried on in the town. There are also tanneries, dye-works, and soap-works; and 5 fairs are held here in the course of the year.

**HERSIN-COUPIGNY**, a commune of France, in the dep. of Pas-de-Calais, cant. of Houdain. Pop. 1,126.

**HERSTAL**, or **HERSTAL**, a town of Belgium, in the prov. and  $3\frac{1}{2}$  m. NE of Liege, on the Maese. Pop. 6,032. From the abundance of coal and iron in the vicinity, it has considerable manufactures of hardware.

**HERSTEIN**, a small town of the Prussian states, in the grand duchy of the Lower Rhine, 31 m. E by N of Treves.

**HERTAIN**, a commune of Belgium, in the prov. of Hainault, cant. of Tournay. Pop. 261.

**HERTFORD**, an ancient borough and market-town, the cap. of the co. of Hertford, situated on the river Lea, 21 m. N of London, and 5 m. NW of Broxburn, a station on the North-eastern railway, with which it is connected by a branch-line. Pop. of the old borough in 1801, 3,360; in 1831, 4,028; of the new borough, as recently enlarged by act of parl., in 1821, 4,235; in 1831, 5,247; in 1851, 6,605. It lies sheltered in the valley of the Lea, and consists of several neat and clean streets, built with tolerable regularity. Among the principal buildings are All Saints' and St. Andrew's churches, the East India company's preparatory school, Christ's hospital, the county-jail and house-of-correction, and the town-hall, sessions-house, and market-house.—The East India company's school, preparatory to the course of instruction at their college at Haileybury, is a large brick building. The college itself was established here in 1806, and originally occupied this edifice, till it was removed to Haileybury, about  $2\frac{1}{2}$  m. distant. The object of these institutions is to give a suitable education for youths about to be appointed to any post in the civil department of the company's establishment in India; as the seminary at Addiscombe in Hampshire is intended to do in relation to the military department. The buildings at Haileybury were erected at an expense of £70,000. Besides residences for the principal, and several professors, they contain accommodation for upwards of 100 students. The students, who must enter between the ages of 16 and 20, are classed in 4 successive terms of 6 months each. Every student pays £105 per ann., and costs the Company in addition £117, before he is ready to sail for India.—Christ's hospital is partly an independent institution, and partly a preparatory seminary for the splendid royal institution of the same name in Newgate-street, London. Upon an average of 14 years to 1834, the income of the borough was £550. H. returns 2 members to parliament. The number of electors registered in 1837 was 619; in 1848, 611. H. is one of the polling-places, and the principal place of election, for the co. members.—There is no manufacture in H.; but numerous mills are situated on the rivers Lea and Mimram, through which a good deal of business is done in malting and meal. Its commerce has hitherto chiefly depended on the navigation of the Lea. The most important articles of trade, besides malt and flour, are wheat and wool, much of which is sent to London, whence coal and other heavy commodities are brought in exchange. One of the largest corn-markets in the kingdom is held here.—At the time of Domesday survey H. contained 146 burgesses, and had two churches. In the 25<sup>th</sup> of Elizabeth, the Michaelmas term was adjourned from London to H., on account of the plague that was raging in the metropolis, and all the courts were kept in the castle. This was also the case, and from a similar cause, in the 34<sup>th</sup> and 35<sup>th</sup> of the same reign.

**HERTFORD**, a county in North Carolina, U. S., situated towards the NE part of the state, and watered by branches of Chowan river. Area 356 sq. m. The cap. is Winton. Pop. 7,484.—Also the cap. of Perguiman's co., in North Carolina, 50 m. S by W of Norfolk.

**HERTFORDSHIRE**, or **HERTS**, an inland county of England, bounded by Cambridgeshire on the N; by Essex on the NE, E, and SE; by Middlesex on the S; by Buckinghamshire on the SW and W; and by Bedfordshire on the NW. It is separated from Essex, on the E and SE, by the rivers Stort and Lea. Its form is very irregular. It lies NE and SW; and a small part of the co. belonging to Cashio hundred is isolated in Buckinghamshire; on the other hand, similar parts of Bucks and Bedfordshire are isolated in Dacorum and Hitchin hundreds, Herts. Its greatest length, from NE to SW, is about 35 m.; its greatest breadth, from NW to SE, about 27 m. Its circuit is between 130 and 140 m.; and its area has been variously estimated at 528 and 630 sq. m.; and in the population and other returns for 1831, at 400,370 acres. The general appearance of H. is extremely pleasant, especially as seen from eminences or from the high roads, though its eminences are not sufficiently elevated, nor its vales sufficiently depressed and broken, to afford the decisive character of picturesque or romantic beauty. The N part is the most hilly. A range of high ground stretches out from the neighbourhood of King's Langley, towards Berkhamstead and Tring, which in many parts commands a great extent of country. Most of the country is enclosed; and the enclosures being principally live hedges, intermixed with flourishing timber, have a verdant and pleasing effect.

**Rivers.** The principal rivers are the Lea and its affluents, the Stort, the Rib, the Quin, the Beane, the Mimram, and the Ash; and the Colne, with its affluents, the Ver or Meuse, the Gade, and the Chess. The Lea rises near Luton in Bedfordshire, and entering the county at Hide Mill, proceeds at first in a SE direction, and then NE, flowing past Hertford and Ware. Changing its course to the S after its conflux with the Stort, it finally quits the county near Waltham abbey. This river is navigable to Ware and Hertford. The Stort enters this county from Essex, a little to the N of Bishop-Stortford, and divides the county from Essex to its junction with the Lea. The Rib has its rise near Cornbury, above Buntingford, past which it flows, and proceeding in a SE direction falls into the Lea between Hertford and Ware. The Beane rises near Cromer, and taking a S course, flows past Watton, and joins the Lea at Hertford. The Mimram or Moran runs past Welwyn, and flows on in a meandering course till it falls into the Lea at Hertford. The Colne is formed by the union of several small streams, one of which rises in Middlesex; flowing on to Watford, it passes that town on the SE; and then turning SW, about  $1\frac{1}{2}$  m. beyond Rickmansworth it leaves this county and enters Middlesex. The Ver or Meuse rises on the confines of Bedfordshire, and flowing SE, passes Redburn and Reilburn-bury, and unites with the Colne, which is but a very inconsiderable stream till thus enlarged by the waters of the Meuse. The Gade has its origin on the borders of Buckinghamshire, and flowing to the S, near Rickmansworth falls into the Colne. Many other streams rise in this county, and several of them form the heads of more considerable streams in the adjacent shires.

**Canals.** In the reign of Henry VI., government was induced to attempt to make the Lea navigable. For this purpose, dams were constructed at the upper part of the river's course, in order that a sufficient depth of water for floating boats might be procured. These attempts, however, were found to be very inept;

and in 1767 application was made to Smeaton, the celebrated engineer, to improve the works. A canal was then made from Hertford, where the river is upwards of 111 ft. above sea-level, to near the confluence of the Stort with the Lea, E. of Hoddesdon; and thence various cuts were made to Tottenham. From Lea bridge at Clapton, another cut was made to Oldford near Bow-bridge. From Brouley, a cut  $1\frac{1}{2}$  m. in length has been opened into the Thames, at Limehouse, by which the circuit of the Isle of Dogs, in the Thames navigation, is avoided. In 1824, a cut 1 m. in length was opened from Oldford, near Temple-mills, to the Regent's canal, at Bethnal-green. By these numerous cuts the sinuosities of the old river are avoided, and an easy navigation for barges from the Thames to Hertford has thus been effected. The length of the whole line, along the canals and the rivers, is about 25 m. The Grand Junction canal enters this co. N of Tring, where it is joined by the Wendover cut, a navigable feeder, and a collateral cut to Aylesbury. Here its elevation above the level of the Thames is 402 ft. Running along the valley of the Quin, by Berkhamstead, and SW of Hemel-Hempstead to Watford, along the valley of the Gade, a branch of the canal communicates with the latter town. The main trunk continues SW along the valley of the Colne, to Rickmansworth, and thence passes into Middlesex.

The Carlisle and Glasgow, or high North road, enters this co. from Whetstone to Chipping-Barnet, whence it crosses a narrow part of Essex to Little-heath, and then proceeds N by Hatfield, Welwyn, Stevenage, and Baldock, into Bedfordshire. The road to Liverpool branches from this road near Chipping-Barnet, and runs, along the line of Watling-street, through St. Alban's to Dunstable. The highway returns for 1839 show an expenditure of £11,862 on 1,475 m. of road in this co.

**Railways.]** The Northern and Eastern, or London and Cambridge railway, enters this co. near Waltham-cross, and running nearly in the line of the Lea river navigation by Broxburn and Hoddesdon north-eastwardly, enters Essex and Middlesex. The Broxburn and Hertford railway runs from the North-Eastern line at Broxburn to Hertford. The London and Birmingham railway, open throughout, runs through the SW quarter of Herts nearly in the line of the Grand Junction canal; and has stations at Watford, Berkhamstead, and Tring.

**Subsoil, soil, &c.]** The basis of almost the whole co. is chalk intermixed with silex. Most of the valleys are deep enough to expose some of it, and in the north-western district, near Bedfordshire, it rises to the surface in hills of considerable elevation. The whole co. is comprehended in the London chalk-basin.—The soil may be divided into chalk, clay, and gravel, according to the prevalence of each ingredient; and the mixture forms loams of various qualities. Arthur Young, who estimates the area of the co. at 302,088 acres, states the following as the proportions of these soils:

Chalk,	46,720 acres.
Clay,	90,240
Loam,	142,720
Rich loam,	5,420
Poor gravel,	17,280
<b>Total,</b>	<b>302,080</b>

The prevailing soils thus appear to be loam and clay. The most productive of the sandy loams are found on the W side of the river Lea, extending in a line of between 2 and 3 m. in breadth, through the parishes of Cheshunt, Wormley, Broxburn, and Hoddesdon, and on the S to the hills about Amwell. The principal clay district is on the NE or Essex side; yet even here the upper surface is in general a strong wet loam, improved by draining, and by ample dressings of manure from the capital.

**Produce.]** At an early period in the agricultural history of England, this co. was superior to most others in its husbandry; but it has not lately made equal improvement with some other parts of the country. Large quantities of turnips are grown, and artificial grasses are cultivated to a great extent; but the principal part of the land is under tillage for wheat, barley, and oats. Wheathempstead, on the river Lea, derived its name from the excellence of its wheat. A few acres of hops were introduced in the ps. of Lambourne and Stapleford-Abbott in 1835. The meadows on the river Stort, extending from Hackerill to Hertford, are very productive: as are those likewise in the vicinity of the Lea, and in the neighbourhood of Rickmansworth. In the SW corner of the co., and particularly in the ps. of Rick-

mansworth, Sarrat, King's Langley, Abbot's Langley, Flaunden, Bovington, Watford, and Aldenham, are numerous orchards. On the best soils nearest to London, cabbage, potatoes, pease, and other culinary vegetables are forced for market. In the poorer soils throughout the county, there are numerous small woods and coppices interspersed with cultivated fields; but these have latterly been much encroached on by the principal objects of H. husbandry. The wood-lands contain timber, chiefly consisting of oak, beech, and elm.—Live produce is not an object of marked regard in H. There are no peculiar breeds of cattle. The sorts kept on farms are principally the Suffolk, Hereford, Devon, &c., breeds. The sheep are mostly ewes of the South-down and Wiltshire kinds, or a breed between the Coteswold and Leicester. The horses preferred for farm-work are the Suffolk punches and a few Lincolns.

**Climate.]** The climate is considered to be mild and healthy; but it does not differ materially from that of other cos. equally southern.

**Manufactures, trade, &c.]** There are few manufactures in this co.; but silk and cotton goods are manufactured in the vicinity of St. Alban's, Rickmansworth, and Watford. The total number of hands employed in silk mills within the co. in 1847 was 912. Straw-plait has latterly been the principal employment of the labouring females in most parts of the county. Black lace used to be made to some extent about Berkhamstead; but the business has declined, and straw-plait is the chief manufacture there also. Malting is carried on to a great extent at Hitchin, Royston, Baldeck, and Ware; and there are several large paper-mills.

**Divisions and Statistics.]** \* This co. is divided into 8 hundreds, viz.:

Name.	Pop. in 1831.	1841.	1851.
Braughing,	17,827	19,146	20,348
Broadwater,	17,043	17,126	18,800
Cashio,	33,291	29,947	31,009
Dacorum,	28,872	33,693	36,249
Edwinstree,	9,237	9,925	9,883
Hertford,	19,217	15,404	15,447
Hitchin and Pirton,	10,711	11,972	13,405
Odsey,	7,143	8,047	8,552
Hertford borough,		5,450	6,605
St. Alban's do.,		6,497	7,000
	143,341	157,207	167,298

These hundreds are divided into 134 parishes, which contain 1 county-town, Hertford; 2 boroughs, Hertford and St. Alban's; and 19 market-towns, the principal of which are: Baldock, Barnet, Berkhamstead, Bishop's-Stortford, Hatfield, Hemel-Hempstead, Hertford, Hitchin, Hoddesdon, Royston, Tring, Ware, and Watford. Houses in 1831, 26,549; in 1841, 30,155; in 1851, 33,954. Pop. in 1801, 101,892; in 1831, 147,575, consisting of 29,250 families, of whom 13,268 were chiefly employed in agriculture, 8,552 in trade, manufactures, and handicraft, and 7,430 otherwise occupied; in 1841, 162,394; in 1851, 167,298. The annual value of real property assessed to income tax in 1815 within this co. was £571,107; in 1842-3, £849,793, whereof £438,225 were on lands, and £340,267 on houses.—H. was partly in the dio. of London, and partly in that of Lincoln; but has recently been transferred to the dio. of Rochester.—The number of Friendly societies in the co., on 20th November, 1838, was 65; income, £9,036; in 1848, 110; income, £13,944. The number of savings' banks was 5; total number of depositors, 2,595; total amount deposited, £84,179; average amount invested by each depositor, £32. In 1848, the savings' banks were 7 in number, and the amount deposited in them £114,482 by 4,255 depositors.—The poor-rate returns for 3 years, to Easter 1750, show an average expenditure of £16,452 on the poor of this co. In 1803



the expenditure was £58,638; in 1839, £53,800; in 1847, £64,589, being at the rate of 1s. 8½d. in the pound on the annual value of property rated to poor-rates.

*Franchise and government.*] This co. returns 3 members to parliament, who are polled for at Hertford, Stevenage, Buntingford, Bishop's-Stortford, Hoddeston, Hatfield, and Hemel-Hempstead, the principal place of election being at Hertford. The number of electors registered for the county in 1837, was 5,245; in 1848, 5,430. Besides the co. members, 4 borough members are returned, 2 each for Hertford and St. Alban's. H. is comprehended in the home circuit. The assizes and quarter-sessions are held at Hertford.—It appears that in a list of 11 agricultural counties, including all the surrounding district except Middlesex and Essex, H. ranks highest in crime, being 1·34, while the average is 1·07. The total number of offenders committed for trial or bailed within the co. in 1847 was 291, of whom 216 were convicted.

*History.*] H., with the adjoining counties of Bedford and Buckingham, previous to the Roman invasion, was chiefly possessed by the Cassii or Catteuchani. After the complete subjugation of the southern parts of Britain, H. was included in the district named *Flavia Caesariensis*; but on the conquest and division of the island by the Saxons, subsequent to the Roman departure, it became divided between the East Saxon and Mercian kingdoms; though by far the greater part was included in the latter. Edward the Elder, son of Alfred, built the castle of Hertford. After the general rising of the peasantry under Wat Tyler and Jack Straw, many of the ringleaders were executed at St. Alban's, where the king, with a guard of 1,000 men, attended. In the war of the Roses, two sanguinary battles were fought at St. Alban's, between the houses of York and Lancaster. In the parliamentary war, this co. was the scene of one of Cromwell's earliest exploits, who, when he was yet only captain of his own troop of horse, seized the high-sheriff when he was on his way to St. Alban's, to denounce the parliamentary men as traitors.

**HERTINGFORDBURY**, a parish in Hertfordshire, 2 m. WSW of Hertford. Area 2,586 acres. Pop. in 1831, 753; in 1851, 752.

**HERTKOUCE**, a village of Austria, in Military Slavonia, comitat of Peterwardein, to the N of Klenak.

**HERTOGENBUCH**. See **BOIS-LE-DUC**.

**HERTRE**, a hamlet of France, in the dep. of the Orne, cant. and 2 m. W of Alençon. It is noted for a species of crystal found in the environs, called Alençon diamonds.

**HERTS**. See **HERTFORDSHIRE**.

**HERTSBERGHE**, a commune of Belgium, in the prov. of East Flanders, dep. of Oostcamp. Pop. 510.

**HERTSWEGEN**, a commune of Belgium, in the prov. of Brabant, dep. of Duyshourg. Pop. 140.

**HERTSMONCEAUX**, a parish in Sussex, 3 m. E of Hailsham. Area 5,039 acres. Pop. in 1831, 1,338; in 1851, 1,292.

**HERTSEK**. See **HERTZEGOVINE**.

**HERTZO**, an island of the gulf of Bothnia, near the coast of Sweden, in the laen of Pitea, E of Lulea, in N lat. 65° 35'. It is about 12 m. in length, and 6 m. at its greatest breadth.

**HERVAL**, a parish of Brazil, in the prov. of São-Pedro-do-Rio-Grande, in the mountain-range of the same name, and near the Rio Jaquarão. The Serra-H. gives rise to several streams which flow into the lake Dos Patos.

**HERVAS**, a town of Spain, in Estremadura, in the prov. and 63 m. NNE of Cáceres, and partido of Jarandilla. Pop. 2,600. It has a parish-church, an hospital, a custom-house, and a convent, and has some manufactories of common cloth.

**HERVE**, a department, commune, and town of Belgium, in the prov. of Liege, arrond. of Verviers. Pop. of dep. 3,354. The town is 5 m. NW of Verviers, and 11 m. E of Liege, on a rising ground. Pop. 3,304. The environs afford excellent pasturage, and are noted for their butter and cheese. It has also considerable manufactories of cloth and other

woollen fabrics, shoes, and hosiery, and possesses an active transit-trade with Germany.

**HERVE (SAINT)**, a commune of France, in the dep. of the Côtes-du-Nord, cant. of Uzel, 9 m. NNW of Loudeac. Pop. 1,301.

**HERVEY BAY**, an extensive indentation of the coast of E. Australia, enclosed on the E by a long and narrow island named Great Sandy island, terminating on the N by a cape of the same name, in S lat. 25°, and E long. 153°. The depth of its embrasure is about 45 m., and the breadth of its entrance, which opens to the N, nearly the same.

**HERVEY ISLANDS**. See **HARVEY ISLANDS**.

**HERVIAS**, a town of Spain, in Old Castile, in the prov. of Logrono, partido and 7 m. SW of Santo-Domingo-de-la-Calzada. Pop. 426.

**HERWIG**, a commune of Belgium, in the prov. of East Flanders, dep. of Sainte-Marie-Hoorebeke. Pop. 177.

**HERWIGSDORF**, a village of Prussia, in the prov. of Silesia, regency and 48 m. NW of Liegnitz, circle and 3 m. WSW of Freystadt. Pop. 1,385.—Also a village of Saxony, in the prov. of Upper Lusatia, SE of Löbau. Pop. 958.

**HERWYNEN**, a village of Holland, in the prov. of Gelderland, arrond. and 15 m. WSW of Thiel, cant. and 8 m. WSW of Geldermalsen, on the r. bank of the Waal. Pop. 1,834.

**HERXHEIM**, or **HERXENHEIM**, a village of Bavaria, in the circle of the Pfalz, cant. and 6 m. SE of Landau. Pop. 3,557. An engagement took place here between the French and Austrians on the 17th June, 1793.

**HERY**, or **AIRY**, a commune of France, in the dep. of the Yonne, cant. and 1½ m. E of Seignelay, and 9 m. NNE of Auxerre. Pop. 1,453. It contains the remains of an ancient Benedictine convent, noted for the national council held in it in 1015, which decreed the junction of the duchy of Burgundy with France.

**HERY-SUR-UGINE**, a village of Sardinia, in the div. of Savoy, prov. of Upper Savoy, mand. of UGINE, and 10 m. NNE of Conflans. Pop. 1,200.

**HERZBERG**, a bailiwick and town of Hanover, in the landr. and 40 m. SSE of Hildesheim, and 21 m. ENE of Göttingen, on the l. bank of the Söle, near the S declivity of the Harz. Pop. 3,706. It has a castle, which belonged to the electors of Brunswick, and a church; and possesses an extensive manufactory of arms, a public granary, manufactories of linen and woollen fabrics, a spinning and a paper mill. Pop. of bail. 6,492.—Also a town of Prussia, in the prov. of Saxony, regency and 63 m. ENE of Merseburg, circle and 12 m. SE of Schweinitz, on an island formed by an arm of the Elster. Pop. 3,720. It is walled round, and has a suburb, and 2 churches. Common cloth and pottery form the chief articles of local manufacture. To the E of the last-named town is Old Herzberg, a village containing 200 inhabitants. The direct Berlin and Dresden railway passes H., and has a station here 47 m. from Berlin, and 23 m. from Dresden.

**HERZEELE**, a commune of France, in the dep. of the Nord, cant. of Wormhoudt, 13 m. SE of Dunkirk, near the r. bank of the Yser. Pop. 1,805.—Also a department and commune of Belgium, in the prov. of East Flanders, arrond. and 13 m. E of Audenarde. Pop. of dep. 1,903; of v. 725. It has a considerable trade in lint and linen.

**HERZEGOVINE**, **HERTZEGOVINE**, **HERZGOVINA**, or **HERTSEK**, a sanjak of Bosnia, but forming a kind of debatable land between the Austrian and Turkish frontiers. It lies between the parallels of 42° 25' and 44° N; and between the meridians of 16° 20' and 19° 10' E. Its length from NW to SE



is about 130 m.; its mean breadth 60 m. Its superficial area may be taken at 7,000 sq. m. On the NW it is bounded by the sanj. of Bagnalouka; on the N and NE by that of Trawniki, from which it is separated by the Dinaric Alps; on the E it has the sanj. of Novibazar, from which it is likewise separated by the Dinaric Alps; on the SE it skirts the Montenegro territory, and on the SW and W, the frontiers of Dalmatia, through which it throws out a narrow projection to the Adriatic coast, terminating in the point of Klek. The entire country is crossed by ramifications of the Dinaric chain. The only extensive plains are those of Gabela and Grahovo, on the frontiers of Montenegro. The general declination of the surface is towards the SW, to the Adriatic; and nearly all its streams are carried into that sea by means of the Narenta, which receives on the r. the Dretsinitza, the Josinitza, and the Trebisat; and on the l. the Drinovnik, the Jesero, the Bouhna, and the Croupa. The chief towns are Mostar, which is the cap., Stolacz, Trebigno, Nikitsch, and Poscitel.

**HERZMAN-MIESTECTZ.** See HERMANSTADT.

**HERZNACH** (OBER and UNTER), two contiguous villages in Switzerland, in the cant. of Argau, S of Frick. United pop. 766.

**HERZOGAU**, a village of Bavaria, in the circle of the Upper Pfalz, presidial and 2 m. SSE of Waldmünchen, and 39 m. NE of Ratisbon. Pop. 220. It has 2 churches and an alms-house, and possesses a brewery and 2 large glass-houses.

**HERZOGENAURACH**, a town of Bavaria, in the circle of Middle Franconia, 14 m. NW of Nurnberg, and 26 m. NE of Anspach, on the l. bank of the Aurach. Pop. 1,827. It has a castle and a church, and possesses several manufactories of woollen fabrics, a cotton spinning-mill, and a considerable trade in cattle and fish.

**HERZOGENBUCHSEE**, a parish and village of Switzerland, in the cant. of Berne, bail. and 5 m. SE of Wangen, and 8 m. ESE of Soleure. Pop. (Prot.) 6,000. It has a government corn-magazine, and several well-frequented markets.

**HERZOGENBURG**, a market-town of Austria, in the prov. of Lower Austria, in the upper circle of the Wienerwalde, 8 m. NNE of St. Polten, in a marshy plain on the r. bank of the Traisen. Pop. 1,280. It is surrounded by a wall and ditch, and has an old castle, and an Augustine convent founded in 1244, and containing an extensive library. This town is the ancient *Ducum-Burgum*.

**HERZOGENRATH**, or **RODE-LE-DUC**, a town of Prussia, in the prov. of the Rhine, regency and circle and 8 m. N of Achen, on the Worno, near the Belgian frontier. Pop. 466. It was formerly fortified, and has the ruins of an ancient castle, and 2 Catholic churches. In the environs are extensive coal-mines and quarries of freestone.

**HERZOG-ERNST**, a summit of the Noric Alps, on the confines of the archduchy of Austria, and of the kingdom of Illyria, 57 m. S of Salzburg. It rises to the height of 9,600 ft. above sea-level.

**HERZOGSWALDAU**, a village of Prussia, in the prov. of Silesia, regency and 51 m. NW of Liegnitz. Pop. 848. In the circle and 3 m. NW of Freystadt is the v. of Nieder H., containing 646 inhabitants.

**HERZOGSWALDE**, a village of Saxony, in the Meissner circle, SW of Dresden. Pop. 667.—Also a village of Prussia, in the regency of Königsberg, S of Liebstadt. Pop. 467.

**HESARAB**, **HEZAR-ASP**, or **ASARYS**, a town of Turkomania, in the khanat and 69 m. ESE of Khiva, a little to the S of a canal of the same name, and near its junction with the Amu or Jihun. It is enclosed by a rampart of earth, and contains about

600 houses. A considerable trade is carried on by the inhabitants with the surrounding countries.—The canal of H. extends from the capital to the Amu, and forms one of the numerous drains by which the country to the S of the sea of Aral is intersected.

**HESDIN**, a canton, commune, and town of France, in the dep. of the Pas-de-Calais, arrond. of Montreuil-sur-Mer. The cant. comprises 23 com. Pop. in 1831, 14,087; in 1841, 14,606. The town is 15 m. SE of Montreuil, and 35 m. WNW of Arras, in a marshy and insalubrious valley, on the Canche, a little above the confluence of that river with the Ternoise. Pop. in 1841, 3,790. It is surrounded by walls, with bastions and considerable outworks; and the Canche, by which it is intersected, maintains a constant supply of water in the ditches. It has a town-hall, a church, and a house-of-detention; and possesses manufactories of hosiery, soap, oil, earthenware, bricks, tiles, and leather, several breweries, and extensive bleacheries. Fairs for cattle, horses, and local produce, are held here 4 times a-year.—This town was founded in 1554, by Charles V., on the site of the village of Menil, 3 m. from Hesdin-le-Vieux. It was removed to its present situation by Louis XIII., in 1639, and in 1659 was united by the treaty of the Pyrenees to France. The valley of the C. is highly productive in hemp and flax.

**HESDIN-LE-VIEUX**, a village of France, in the dep. of the Pas-de-Calais, cant. of Parcq, 12 m. W of St. Pol, and 3 m. ESE of Hesdin, on the r. bank of the Canche. This was formerly a place of considerable strength, and was the scene of frequent engagements during the wars of Charles V. and Francis I. It was destroyed in 1555 by Faillibert-Emmanuel, duke of Savoy.

**HESHBON**, or **HUSBAN**, a tent village of Syria, in the pash. and 105 m. SSW of Damascus, and 51 m. ENE of Jerusalem.

**HESKEN**, or **HISKEN**, a township in the p. of Eccleston, Lancashire, 2 m. N of Prescott. Area 1,235 acres. Pop. in 1831, 324; in 1851, 359.

**HESKET-IN-THE-FOREST**, a parish in Cumberland, 9 m. NNW of Penrith, W of the Eden. Area 14,961 acres. Pop. in 1831, 2,107; in 1851, 2,051. It comprises the townships of Nether and Upper H., 7½ m. SSE of Carlisle. Pop. 806.

**HESKET-NEWMARKET**, a small market-town in the p. of Calbeck, Cumberland, 9 m. SE of Wigton, on the Caldew.

**HESLERTON**, a parish in the E. R. of Yorkshire, 8 m. ENE of New Malton, on the York and Scarborough railway. Area 6,170 acres. Pop. in 1851, 618. It includes the townships of East and West H.

**HESLERTON (EAST)**, a township in the p. of Heslerton, E. R. of Yorkshire, 3 m. SSE of Yeddingham, S of the Derwent. Area 3,990 acres. Pop. 267.

**HESLERTON (WEST)**, a township in the p. of Heslerton, E. R. of Yorkshire, 1½ m. SW of East H. Area 2,180 acres. Pop. in 1831, 299; in 1851, 381.

**HESLETON-COLD**, a township in the p. of Dalton-le-Dale, co. of Durham, 6½ m. N of Heslerton-Monk. Area 1,031 acres. Pop. in 1851, 117.

**HESLETON-MONK**, a parish and township in the co. of Durham, 13 m. N of Stockton-upon-Tees, on a small stream which flows into the North sea. Area of p., 7,180 acres. Pop. in 1851, 2,709. Area of township, 2,937 acres. Pop. in 1851, 1,495.

**HESLEY-HURST**, a township in the p. of Rothbury, Northumberland. Pop. in 1851, 47.

**HESLINGTON (ST. PAUL)**, a parish in the E. R. of Yorkshire, 1½ m. ESE of York. Area 1,187 acres. Pop. in 1841, 266; in 1851, 228.

**HESLINGTON (ST. LAWRENCE)**, a township in the p. of St. Lawrence, E. R. of Yorkshire. Pop. 266.

**HESN-KEIFA**, a fortified town of Turkey in

Asia, capital of a sanj. in the pash. and 70 m. S of Diarbekir, and 63 m. NW of Jezirah, on the r. bank of the Tigris. It has a fortress on an adjacent height. This town bore in ancient times the name of *Castrum Cepha*. Its fortifications were destroyed by Justinian.

**HESN-MANSUR**, a town of Turkey in Asia, in the pash. of Marash, sanj. and 10 m. NE of Someisat, on the r. bank of the Euphrates.

**HESPHOUDT**, a commune of Belgium, in the prov. of Brabant, dep. of Gaesbeeck. Pop. 73.

**HESAY**, a township in the p. of Moor-Monkton, ainsty and  $5\frac{1}{2}$  m. NW of York. Area 1,120 acres. Pop. in 1831, 170; in 1851, 141.

**HESSE-CASSEL**, **KUR-HESSEN**, or **ELECTORAL HESSE**, an electorate of Germany, created out of the former landgraviate of the same name. It lies between the parallels of  $49^{\circ} 56'$  and  $52^{\circ} 26'$  N, and the meridians of  $8^{\circ} 31'$  and  $10^{\circ} 33'$  E; and is composed of 6 distinct portions. The principal section is bounded on the NW by the Prussian prov. of Westphalia; on the NE by the kingdom of Hanover; on the E by the Prussian prov. of Saxony, the grand-duchy of Saxe-Weimar, and by Bavaria; on the SE by Bavaria; on the SW by the grand-duchy of Hesse and the republic of Frankfurt; and on the W by the duchy of Nassau, the grand-duchy of Hesse, and by Waldeck. The two principal *enclaves*, or detached portions, are Schmalkalden and Schaumburg. The surface is 204.09 German sq. m., according to Hassel; Stein gives 209. Perhaps, including the detached territories, 4,350 British sq. m. will be near the truth. The pop. was returned to the confederacy at 545,208; subsequently it was estimated at 585,100, by Stein; in 1826 it amounted to 592,000, according to Balbi; in 1837 it was 782,671; but in 1846 it was returned at only 754,590. The following table presents the area and pop. of this electorate, according to the *Almanach de Gotha* for 1851:

	Area.	Pop. in 1832.	Pop. in 1846.
Lower Hesse, with Schaumburg,	983	325,765	366,663
Upper Hesse,	413	113,837	122,432
Fulda,	418	128,584	140,718
Hanau,	275	109,663	124,782
	2089	677,849	754,590

**Physical features.** Situated in the NW angle of the great German plateau, or Hessian terrace, H. is a mountainous country, but is intersected with valleys which offer much picturesque scenery,—particularly the fine valley of the Fulda, in which the cap. lies. The principal mountains are those of the Thuringian forest, to which belongs the Inselberg, 2,791 ft. in alt.; the Werra mountains, in which the Meissner attains an alt. of 2,327 ft.; the Rhön; the Fulda mountains, which are not very high, but remarkable for their volcanic origin and beautiful forests; the mountains of Hanau; and the Sünter. The principal rivers are the Weser, with its two branches the Werra and the Fulda; and the Main, and the Lahn, both affluents of the Rhine. Among the minor streams are the Diemel, the Edder, with its affluent the Schwalm, and the Haune, all tributaries of the Fulda; the Ohm, an affluent of the Lahn; and the Nedda and Kinzig, affluents of the Main. The Fulda and the Kinzig are the only streams whose course lies wholly within the electorate.

**Productions, &c.** H. produces game, corn, fruit, wine, wool, flax, and herap. Among the minor articles of cultivation are chicory, hops, and poppy-seed; and juniper-berries form an article of export from Lower H. Near Frankenberg is a gold-mine; and copper is mined at Richelsdorf. Silver, copper, lead, and iron, are found in considerable quantities; also alum, vitriol, sulphur, coal, marble, and alabaster. About

50,000 quintals of raw iron, and 19,000 q. of bar or wrought iron, are annually made; and upwards of 5,000 cwt. of cobalt are obtained. Anthracite and coal are extensively wrought. The export of wool in 1835 amounted to 27,533 lbs. There are several salt springs, mineral waters, and medicinal baths. With the exception of the territory of Schmalkalden, the prevailing branch of industry in H. is that of agriculture and its immediately related arts; yet the state of agriculture here is inferior to that of the neighbouring Hanoverian, Prussian, and Saxon provs. About 1,000,000 acres were under cultivation in 1840. Next to the cultivation of the cerealia, that of lint is the most important; and wine is grown to a considerable extent as far N as Witzzenhausen. The tobacco of Hanau is much esteemed. The forests occupy 1,578,333 morgens, of which 835,314 belong to the state.—There are few manufactures, except linen-weaving, which is carried on all over the country, and exported to the yearly value of 1,000,000 dollars. Carpets, porcelain, leather, paper, cutlery, gunpowder, and tar, are made. The transit-trade is very considerable.

**Population.** In 1818, there were 329,200 Calvinists, 140,000 Lutherans, 90,000 Catholics, 8,500 Jews, and 200 Mennonites in this country. Later returns estimate the Protestants at 605,000; Roman Catholics at 105,000; Jews at 15,000. With the exception of the Jews, and about 4,000 of French and Flemish extraction, all the pop. is of German descent. There are 3 Protestant consistories: viz., those of Cassel, Marburg, and Hanau; 12 Protestant dioceses; and 291 parishes. The Catholics are under the bishop of Fulda, a suffragan of Friburg; and have 64 parishes. There are 6 convents within the electoral territory, and 18 synagogues. The Hessians are a strong and well-formed race. The women of the lower classes are neither handsome nor pleasant, and the lower class of villages are dirty and squalid in all their attributes. Hassel represents them as having no genius, and being little adapted for the cultivation of the arts. "No distinguished poet or author of genius in German literature," he says, "has been born in H."

**Education.** The H. establishments for education are inefficient. The elementary schools are not good, and the university at Marburg, though a little improved of late, cannot compete with any other German university. It is generally attended by from 220 to 260 students. An ordonnance issued or renewed in 1818, allowed only the sons of nobles, and those civil officers who had equal rank with them, and the eldest sons of clergymen to enjoy a liberal education! There existed likewise a very severe censorship not only upon native publications, but also on the importation of foreign books, lest any liberal and enlightened principles might, by this means, be diffused in the country. The number of primary schools in 1840 was 1,255, attended by 107,600 pupils; there were also 6 gymnasia with 74 professors, and 980 pupils. There are several special institutes for educational purposes.

**Government.** H. holds the eighth place in the German confederacy, and has 3 votes in *plenum*. The elector was an absolute sovereign, until compelled to grant a constitution in 1830. The assembly of estates which it granted, consisting of one chamber of 52 members, were elected partly by the town and the agricultural districts, by direct election. The franchise was possessed by every individual 30 years of age whose civil rights had not been destroyed by a felonious offence. The smaller portion of the members of the estates were the collateral branches of the electoral house and the representatives of the nobility. Religious freedom was

promised; but nothing was said respecting freedom of the press in the constitution. From 1836 to 1848 the liberal party struggled to impede the reactionary tendencies of the elector and his government, and to procure from them trial by jury, freedom of the press, and the other essential elements of popular political progress. In this struggle they have unhappily been defeated by Austrian influence. The succession runs in the male line; the prince is of age at 18.—The members of the ministry are, the ministers of finance, of war, of foreign affairs, of justice, of the interior, the director of the grand state chest [*hauptstaatskasse*] and 2 ministerial councillors.—For administrative purposes the 4 provs. are subdivided into 21 circles; and the principal towns are governed by a burgomaster and a communal council.—The supreme court-of-justice is composed of two chambers, a civil and a communal chamber; and there are 5 *obergericht* or superior tribunals at Cassel, Marburg, Fulda, Hanau, and Rinheln. Each of the provincial caps. has a head-police-court, subordinate to the tribunals in the cap.

*Revenue.*] The revenue amounted to about £643,750 in 1826, according to Balbi; and the debt to £274,166. In 1834–36, the expenditure was 3,258,212 dollars; and the revenue for the same period only 3,069,540 d. In 1846, 1847, and 1848, the entire revenue for the three years was taken at 12,942,460 d.; and the public debt in 1840 was 1,642,566 d. In round numbers the revenue may be stated at £650,000; the debt at £250,000.

*Army.*] The whole military force consists of about 18,000 men. In 1826, the contingent amounted to 5,679, levied by conscription.

*History.*] Hesse belonged to the Frankish empire; and till about the middle of the 13th cent. its history is blended with that of Thuringia. It was only after Henry I., after a violent struggle with the house of Meissen, had got into tranquil possession of Hesse, that the emperor Adolph of Nassau declared it an immediate fief of the empire. Henry made Cassel his residence. After his death the country was divided between his two sons; but one of them having died, it was again united under the other. After several unions and dismemberments, we find it, in 1500, again united under William, who left it at his death to his son Philip, then only five years of age. The troubles which distracted Germany, at this period caused the emperor Maximilian, in 1508, to declare the young landgrave—whose great qualities he foresaw—of age at fourteen. Philip, who obtained for himself the honourable appellation of 'the Magnanimous,' introduced the Reformation into Hesse; and with the secularized goods of the Church, founded the university of Marburg. It was he who, in 1529, negotiated the famous interview between Luther and Zuingli for the purpose of adjusting their differences. He undertook, together with the elector of Saxony, the direction of the Schmalkaldian league. He became a prisoner of Charles V., in the battle of Muhlberg; but obtained his freedom after a captivity of five years. He divided his possessions in 1562 among his four sons; but two of them having died, only the two lines of Cassel and Darmstadt remained. William IV. founded the line of Hesse-Cassel. William VIII. was an ally of England in the Seven Years' war. His son, Frederic II., maintained a brilliant court, and a considerable army, which he sold to England to fight against the cause of American independence. His son, William IX., took part in the war of the Revolution against France; but entered into the treaty of peace at Basle. He was indemnified for his cessions beyond the Rhine by some other districts, and named elector. In the war between France and Prussia, he declared himself neutral; but after the battle of Jena, he was driven from his country on the allegation of his having secretly favoured the Prussian interest, and his dominions were incorporated with Jerome Bonaparte's kingdom of Westphalia. After the victory of Leipzig, the elector returned to his country, and retained his title, although election no longer exists in Germany. William convened an assembly of the States in 1814, but could not agree with them regarding a new constitution. He died on the 27th of February, 1821, and was succeeded by his son, William XI., who established a new administration, and a new division of the country. On the 20th of November, 1847, Frederic William I. succeeded his father William XI. Being the son of the sister of the king of Denmark, the succession to the Danish crown, by the law of 1665, comes to the present elector of H. In the event of the extinction of the male branch of the reigning sovereign.

**HESSE-DARMSTADT, or GRAND-DUCAL HESSE,** a grand-duchy of Germany, consisting of two large and several smaller districts, comprised

between the parallels of 49° 22' and 51° 4' N, and the meridians of 7° 54' and 9° 50' E. The southern part is bounded on the NW by Nassau; on the N by Frankfort and Hesse-Cassel; on the NE and E by Bavaria; on the S by Baden; on the SW by Bavaria; and on the W by the Prussian province of the Lower Rhine. The northern part—of which some small districts lie enclosed in the counties of Waldeck and Nassau—is surrounded on the NE and S by Hesse-Cassel; on the SW by Frankfort and Hesse-Homburg; and on the W by Nassau, and the Prussian province of the Lower Rhine. Besides these sections there are 9 *enclaves*, or isolated districts, belonging to this grand-duchy: viz., Vohl, Horinghausen, and Eimelrode, lying within the principality of Waldeck; Finkenhof, Helenhof, and Wimpfen in the grand-duchy of Baden and in Wurtemberg; the other 3 sections lie within the foreign territory intervening between the two main sections of this grand-duchy. Stein estimates the superficial extent of this country at 153 German sq. m.; Hassel at 193.30, or 4,156 British sq. m. The following table is from the *Almanach de Gotha* for 1851:

	Area.	Pop. in 1832.	Pop. in 1846.
Upper Hesse,	72.9	271,642	310,141
Starkenburgh,	54.8	256,745	317,003
Rhenish Hesse,	25	189,886	225,445
	152.7	718,373	852,679

*Physical features.*] The whole country is mountainous; but where the majestic Rhine breaks through the S part, it expands on both sides into fertile plains. The N part partakes of the features of northern Germany, whilst the southern is adorned with the luxurious vegetation of the S of Germany.—The principal mountains are the Odenwalde, along and across which runs the celebrated road from Darmstadt to Frankfort called the *Bergstrasse*, or 'Mountain-road,' begun by the Romans, and celebrated for the romantic scenery of its environs. To this ridge belongs the Malchen, [alt. 1,640 ft.] formerly believed to be the *Meliboeus* of Ptolemy, and from which there is a beautiful view. The Herberheimer-Höhe, a mountain known by the Romans under the name of *Tannus*, and of which the Feldberg, 2,605 ft. high, is one of the principal points, rises here. The Vogelsberg is a ridge consisting principally of basalt. The principal rivers are the Rhine, the Nahe, the Neckar, the Nidda, the Main, or Mayne, the Lahn, the Schwalen, and the Fulda.

*Productions.*] Of 3,128,586 morgens, or acres—of which there are 22,018 in a German sq. m.—of land in this duchy, 1,589,634 were under the plough; 381,408 in meadow; 38,173 under vines; and 1,081,410 under wood, in 1840.—Copper, iron, and salt are extensively wrought. A considerable amount of linen and coarse woollen goods are woven in this duchy; and paper, chemical substances, and works in metal are principal items in the manufacturing industry. The export of wool in 1835 was 810,714 lbs. The productions in the southern part are those of the S of Germany. The rearing of cattle is a principal branch of agricultural labour in the highland districts. In 1828, the stock was returned at 38,072 horses; 244,029 cattle; 224,243 sheep; 140,501 pigs; and 11,723 goats.

*Population.*] Hassel is of opinion that the pop. of this duchy has reached a higher point of civilization than that of Hesse-Cassel. There are a few Frenchmen and Waldenses, and about 15,000 Jews. Of the pop. in 1828, the Lutherans amounted to 366,000; there were 140,000 Catholics; 98,000 Calvinists; and 1,000 Mennonites. In 1832, when the pop. had increased to 718,373, there were 516,687 Protestants; 177,888 Catholics; 1,295 Mennonites; and 22,174



Jews. The Protestants had 3 superintendentships, 41 deaneries, and 421 parishes. The Catholics had 1 bishop, 17 deaneries, and 146 parishes.—The number of primary schools in 1840 was 1,594. There were 6 elementary polytechnic schools, 7 gymnasia, a university at Gießen founded in 1605, and several special educational establishments.

*Government, &c.* Hesse-D. holds the 9th place in the confederacy, with 3 votes in *plenum*. The succession goes in the male line; the grand duke is of age at 18. The constitution secures equality of rights to every citizen without distinction of religious creed in the Christian confessions. But a short time since the chambers were dissolved on account of their democratic spirit; and in 1848, Duke Ludwig II. retired from the government, and the present duke succeeded, who is supposed to be under Austrian and Bavarian influence. There are two legislative chambers, the constitution of which has been recently liberalised.—The revenue amounted in 1826, according to Balbi, to £652,763; and the debt to £1,125,000. The revenue in 1834 was 6,576,106 florins; and the public debt amounted to 11,564,377 florins. In 1850, the revenue was 7,795,555 florins. In round numbers, the revenue may be taken at £650,000; and the debt at £450,000.

**HESSE - HOMBURG**, a small landgraviate or principality of the German confederation, at the foot of the Taunus mountains, to the N of Frankfurt-on-the-Main, belonging, with the title of landgrave, to a younger branch of the family of Hesse-Darmstadt, and containing, with the seignory of Messenheim, an area of 5 German or 106 English sq. m., with a pop. in 1840 of 23,689; in 1846, of 24,203. In 1806, when the confederation of the Rhine was formed, the landgrave was deprived of his states; but the congress of Vienna not only restored these completely, but gave him an additional district on the l. side of the Rhine. He is also a member of the Germanic confederation; and his contingent to the federal army is 200 men. The government of the little state was absolute until a constitution was granted in January 1850, creating a representative chamber to be elected on the principle of one deputy for every 1,500 of the pop. The administration is managed by 3 commissions; and the supreme tribunal is the court of appeal at Darmstadt. The revenue of the landgraviate is about £75,000. Its debt amounts to £130,000.—The military force amounts to 488 men. The mediatised possessions of the landgrave are the seignory of Oebisfelde, comprising 15 villages, and 3,681 inhabitants, in the circle of Gardelegen, in Prussian Saxony; the seignory of Hötensleben with 5 villages and 3,256 inhabitants, in the circle of Neu-haldeusleben; and the seignory of Winingen, with 2 villages and 1,214 inhabitants, in the circle of Aschersleben.—The pop. is mostly Calvinist. There are about 3,000 Roman Catholics, and 1,000 Jews.—The family residence is at the town of HOMBURG, which see.

**HESSEL**, a small river of Prussian Westphalia, which runs into the Ems, 3 m. W of Sassenberg.

**HESSELOE**, a small island of Denmark, 15 m. N of Sieland, in N lat. 56° 11'. It is about 1½ m. in length.

**HESSEN**, a town of Germany, in Brunswick, 14 m. NW of Halberstadt, and 6 m. E of Hornburg. Pop. 1,400.

**HESSEN (NIDDER)**, or LOWER HESSE, an administrative province of Hesse-Cassel. Area, with the enclave of Schaumbourg, which is administratively annexed to this prov., 98·3 German sq. m. Pop. in 1840, 353,220; in 1846, 366,663. It is divided into 10 circles, viz.: Cassel, Hofgeismar, Wolfhagen, Fritzlar, Homberg, Melsungen, Rotenburg, Esch-

wege, Witzenhausen, and Schaumbourg; and comprises 34 towns and 592 villages and hamlets. Its cap. is Cassel.

**HESSEN (OBER)**, or UPPER HESSE, an administrative province of the landgraviate of Hesse-Darmstadt. Area 72·9 German sq. m. Pop. in 1840, 297,672; in 1846, 310,141. It is divided into 15 *landraths-bezirk*, viz.: Alsfeld, Battenberg, Büdingen, Friedberg, Giessen, Gladenbach, Grünberg, Hungen, Kutorf, Lauterbach, Nidda, Schlitz, Schatten, Vilbel, and Vöhl; and comprises 34 towns, 13 burghs, and 510 villages and hamlets. Its cap. is Giessen.—Also an administrative prov. of Hesse-Cassel. Area 41·3 German sq. m. Pop. in 1840, 119,008; in 1846, 122,432. It is divided into 4 circles, viz.: Marburg, Frankenberg, Kirchhain, and Zeigehain; and comprises 15 towns, 5 burghs, and 250 villages and hamlets. Its cap. is Marburg.

**HESSEN-RHENANE, RHEIN-HESSEN, or RHEINISH-HESSEN**, an administrative province of Hesse-Darmstadt. Area 25 German sq. m. Pop. in 1840, 213,671; in 1846, 225,445. It is divided into 11 cantons, viz.: Alzei, Bingen, Mayence, Niederolm, Oberingelheim, Oppenheim, Osthofen, Pfeddershen, Wöllstein, Wirstadt, and Worms; and comprises 10 towns, 12 burghs, and 168 villages and hamlets. Its cap. is Mayence.

**HESSET**, a parish in Suffolk, 5 m. ESE of Bury-St.-Edmund's. Area 1,568 acres. Pop. 487.

**HESSE**, a parish in Yorkshire, in the co. of the town of Hull, 4 m. W of Hull, with a station on the Leeds and Hull railway. There is here a ferry over the Humber to Barton in Lincolnshire. Area 3,910 acres. Pop. in 1851, 1,576.

**HESTOE**, one of the smaller Faroe isles, 6 m. N of Sandoe.

**HESTON**, a small island on the coast of Scotland, in Kirkcudbrightshire, at the mouth of the river Urr.—Also a parish of Middlesex, 1½ m. N of Hounslow. Area 3,720 acres. Pop. 5,202.

**HESTRAD**, a village of France, in the dep. of Nord, cant. and 4 m. NE of Soire-le-Chateau. Pop. 200.

**HESWALL**, a parish in Cheshire, 3 m. NNW of Great Neston, on the Dee. Area 5,380 acres. Pop. in 1831, 406; in 1851, 657.

**HETA**, a village of Mandshuria, in the prov. of Kirin-Oola, on the r. bank of the Amur.

**HETAN**, a district of Upper Guinea, on the coast of Biafra, to the N of that of Aosa.

**HETEREN**, a village of Holland, in the prov. of Gelderland, arrond. and 9 m. NW of Nimeguen, and cant. of Elst, on the l. bank of the Rhine. Pop. 2,426.

**HETEYM**, a tribe of pastoral Arabs, who inhabit the vicinity of Belbeis, in the prov. of Sharkieh, Lower Egypt. They are said to be able to bring upon the field 2,000 foot-soldiers and 200 horsemen.

**HETHAURA**, or **HETTOWRA**, a town of Northern Hindostan, in the state of Nepal, district of Mok-vanpur, 18 m. SW of Khatmandu, in a fine plain off the Rapti, an affluent of the Gunduck. It is the chief mart for the trade carried on between the northern Nepaulese provinces and the British. The heat of this place is less intense than in Texari; but in consequence of the forests by which it is surrounded, it is extremely insalubrious. The only accommodation for the merchants is a brick building enclosing a square court and a few shops.

**HETHEL**, a parish in Norfolk, 4 m. NE of Wy-mondham. Area 1,428 acres. Pop. in 1851, 211.

**HETHERSET**, a parish in Norfolk, 5½ m. WSW of Norwich. Area 2,674 acres. Pop. in 1851, 1,209.

**HETHERSGILL**, or **HEATHERSGILL**, a township in the p. of Kirk-Linton, Cumberland, 6½ m. NE of Longtown, on a branch of the Eden. Pop. in 1831, 743; in 1851, 792.

**HETI** (RAS EL), or BISTONA, a cape of Persia, in Farsistan, on the Persian gulf, in N lat.  $26^{\circ}30'$ , and E long.  $54^{\circ}20'$ .

**HE-TONG**, a maritime town of Corea, in the prov. of Chuen-lo, on the S coast of the peninsula, 96 m. WSW of Sihg-chu.

**HE-TSING**, a town of Corea, in the prov. of Chu-sin, 51 m. NE of Ku-fu.

**HETT**, a township and village in the p. of Mer-ington, co. and 4 m. S of Durham. Area 1,256 acres. Pop. in 1831, 227; in 1851, 234.

**HETTANGE - LA - GRANDE**, a commune of France, in the dep. of the Moselle, cant. of Cattenom, 4 m. N of Thionville. Pop. 1,106. It has manufactories of pottery; and in the environs are extensive quarries of free and paving stone.

**HETTEVAER**, a group of islands in the West fird, near the coast of the Norwegian diocese of Nordland, to the N of the Salten-fiord.

**HETTINGEN**, a village of Baden, in the circle of the Lower Rhine, to the E of Buchen. Pop. 1,058.

—Also a village of the principality of Hohenzollern-Sigmaringen, in the seignory of the barons of Speth, 3 m. S of Gamartingen, and 11 m. N of Sigmaringen. Pop. 544. It has a castle, and possesses numerous spinning-mills.

**HETTON-WITH-BROADLEY**, a township in the p. of Burnside, W. R. of Yorkshire,  $4\frac{1}{2}$  m. NNW of Skipton. Area 5,269 acres. Pop. in 1851, 187.

**HETTON-LE-HOLE**, a township in the p. of Houghton-le-Spring, co. and 6 m. NE of Durham, connected by railways with Sunderland, Durham, Hartlepool, &c. Area 1,739 acres. Pop. in 1831, 5,887; in 1851, 5,664.

**HETTSTADT**, a town of Prussia, prov. of Saxony, regency and 32 m. NW of Merseburg, circle and 6 m. NNE of Mannsfeld on the Wipper. Pop. in 1846, 4,000. It has several Lutheran churches; and possesses several distilleries, a large copper-finery, and a vitriol-work.

**HETTSTADT (GROSS)**, a village of the principality of Schwarzburg-Rudolstadt, on the Ilm, NE of Stadteim. Pop. 200.

**HETVELD**, a commune of Belgium, in the prov. of East Flanders, dep. of Beernem. Pop. 250.

**HET-Y**. See Y-HET.

**HETZENDORF**, a village of the archduchy of Austria, in the prov. of Lower Austria, circle of the Lower Weineralde, 5 m. SSW of Vienna. Pop. 360. It has a fine castle.

**HETZERATH**, a village of Prussia, in the prov. of the Rhine, regency and NE of Treves.

**HETZFELD**. See HEIDINGSFELD.

**HEUBACH**, a town of Wurtemberg, in the circle of the Jaxt, bail. and 5 m. E of Gmund, and 35 m. E of Stuttgart, on the Rems. Pop. 1,189. It has manufactories of cotton fabrics, especially handkerchiefs and cotton-yarn.—Also a small district in the circle of the Schwarzwald, bail. of Spaichingen, to the E of Rotweil. It gives rise to some of the head-streams of the Neckar and Danube.

**HEUBACH (GROSS)**, a village of Bavaria, in the circle of Upper Franconia, presidial and 5 m. SE of Klingenberg, and 20 m. S of Aschaffenburg, on the r. bank of the Main. Pop. 1,850. In the vicinity, on a height, is a capuchin convent. In the same circle is the village Klein-H., containing 1,571 inhabitants.

**HEUBUDE**, a village of Prussia, in the regency and to the E of Danzig. Pop. 561.

**HEUCHELHEIM**, or HEICHELHEIM, a village of the duchy of Saxe-Weimar, to the N of Weimar. Pop. 242.

**HEUCHIN**, a canton, commune, and town of France, in the dep. of the Pas-de-Calais, arrond. of

Saint-Pol-sur-Ternoise. The cant. comprises 33 com. Pop. in 1831, 13,103; in 1841, 13,294. The town is 8 m. NNW of St. Pol, and 27 m. NW of Arras. Pop. 574. Fairs for cattle and grain are held here 3 times a-year.

**HEUDICOURT**, a commune of France, in the dep. of the Somme, cant. and 5 m. N of Roisel. Pop. in 1841, 1,546.

**HEUGAS**, a commune of France, in the dep. of the Landes, cant. and 8 m. SSE of Dax. Pop. 1,189.

**HEUGH**, a township in the p. and  $1\frac{1}{4}$  m. NE of Stamfordham, Northumberland. Pop. in 1851, 448.

**HEUKELUM**, a town of Holland, in the prov. of North Holland, arrond. and 6 m. NE of Gorcum, and cant. of Vianen, on the l. bank of the Linge. Pop. 599.

**HEULE**, a department and commune of Belgium, in the prov. of East Flanders, arrond. of Courtrai. Pop. of dep. 3,778. The village is  $\frac{1}{2}$  m. NW of Courtrai, on the r. bank of the Heullebeke, an affluent of the Lys. Pop. 3,473. Hemp is extensively cultivated in this locality.

**HEULE-BOUTER-MEULIN**, a commune of Belgium, in the prov. of Flanders, dep. of Heule. Pop. 305.

**HEULLEKEN**, a commune of Belgium, in the prov. of Brabant, dep. of Linke-Beke. Pop. 468.

**HEULLIE**, a commune of Belgium, in the prov. of Antwerp, dep. of Westerlo. Pop. 332.

**HEURE**, a department and commune of Belgium, in the prov. of Namur, arrond. of Dinant. Pop. 535. Lace forms the chief article of local manufacture.

**HEURE (LE GRANDE)**, a village of France, in the dep. of the Seine-Inferieure, cant. of Ingouville, near the r. bank of the Seine. Pop. 500. It stands on a tract of land reclaimed from the sea, and in 1811 was submerged by an inundation.

**HEURE-LE-ROMAN**, a department and commune of Belgium, in the prov. and arrond. of Liege. Pop. of dep. 1,040; of com. 1,000.

**HEUR-LE-TIEXHE**, a department and commune of Belgium, in the prov. of Limburg, arrond. of Tongres. Pop. 211.

**HEURNE**, a department and commune of Belgium, in the prov. of East Flanders, arrond. of Ghent, on the Schelde. Pop. 700.

**HEUSAY**, a commune of Belgium, in the prov. of Liege, dep. of Beyne-Heusay. Pop. 1,230.

**HEUSCHEUER**, a mountain of Prussian Silesia, in the co. and 12 m. WNW of Glatz, in N lat.  $50^{\circ}28'25''$ . It belongs to the Grunewald chain; and has an alt. of 3,080 ft. above sea-level.

**HEUSDEN**, a small but strong town of Belgium, in N. Brabant, built in the midst of marshes, near the Maese, 15 m. NE of Breda, and 8 m. NW of Bois-le-Duc. Pop. 1,889. It was taken by the French in 1672 and in 1795.—Also a commune and village in E. Flanders,  $2\frac{1}{2}$  m. E of Ghent, on the Schelde. Pop. 1,953.

**HEUSENSTAMM**, a small town of Hesse-Darmstadt, 5 m. SE from Frankfurt-on-Main, on the Bieberbach. Pop. 818. Catholics.

**HEUSEUX**, a commune of Belgium, in the prov. of Liege, dep. of Cerexhe-Heuseux. Pop. 248.

**HEUSTREU**, a village of Bavaria, in the duchy of Wurzburg, on the l. bank of the Saale, near Neustadt. Pop. 250.

**HEUSY**, a commune of Belgium, in the prov. of Liege, cant. of Hedimont. Pop. 717.

**HEUVEL**, a commune of Belgium, in the prov. of E. Flanders, cant. of Eyne. Pop. 201.—Also a com. in the prov. of Limburg, cant. of Overpelt. Pop. 238.—Also a com. in the prov. of Brabant,

cant. of Aerschot. Pop. 387.—Also a com. in the prov. of Limburg, cant. of Hasselt. Pop. 370.

HEVE (CAPE DE LA), locally QUIEF, or CHEF-DE-CAUX, a cape on the N coast of France, on the English channel, 54 m. ESE of Cape Barfleur. It has two lights upon it distant NE and SW 70 yds., in N lat.  $49^{\circ} 30' 43''$ , E long.  $0^{\circ} 4' 15''$ . It was the *Caletum Promontorium* of the Romans.

HEVER, a commune and village of Belgium, in the prov. of Brabant, cant. of Haecht. Pop. 1,488.

HEVER, a parish in Kent,  $7\frac{1}{2}$  m. WSW of Tunbridge. Area 2,680 acres. Pop. 582.

HEVERKEIR, a town of Hindostan, in the district of Gundwana, on the Pak, 50 m. ENE of Ellichpur.

HEVERLE, a town of Belgium, in S. Brabant, cant. of Louvain. Pop. 1,770. There are large gin distilleries here.

HEVERSHAM, a parish and village in Westmoreland, 7 m. SW of Kendal. Area 19,749 acres. Pop. in 1831, 3,163; in 1851, 4,432.

HEVES, a palatinate of Upper Hungary, now united with that of Kilső-Szolnok; bounded on the N by the coms. of Borsód, Gomor, and Neograd; on the E by Szabolcs and Grand-Kumania; on the S by the coms. of Csograd and Bekes; and on the W by Neograd, Pesth, and the district of Jazyges. Area 1,207 German sq. m. Pop. in 1837, 292,354. Towards the centre and S this prov. is flat and marshy; in the N rise the lofty mountains of Matra, a spur of the Carpathians. The Theiss is the principal stream of the district, and here receives the Erlau or Eger, the Nuller, and the Zagyva. The Körös waters the S part of the prov. The climate is mild; and the soil generally good and productive. The chief products are wine, corn, and tobacco. Mines of alum are wrought. The inhabitants are almost all of Hungarian descent, mixed, however, with a few Slavonians, Germans, and gipsy wanderers. The prov. takes its name from the small town of Heves, but the diets are held at Erlau; and the archb. of that place is upper palatine *ex officio*. It is subdivided into 4 marches or *jaras*: viz. Gyöngyös, Tarna, Theiss, and Matra; and comprises one town, 16 market-towns, and 127 villages.

HEVES, a small town of Upper Hungary, in the palatinate of the same name, *jaras* of Tarna, 61 m. E of Pest, in N lat.  $47^{\circ} 36' 8''$ . Pop. 5,690.

HEVILLERS, a commune and village of Belgium, in the prov. of Brabant, cant. of Perwez. Pop. 650.

HEVINGHAM, a parish of Norfolk, 3 m. S of Aylesham. Area 2,855 acres. Pop. in 1851, 842.

HEVOSKARI, a cluster of small islands in the gulf of Bothnia, near the coast of Finland, in N lat.  $64^{\circ} 12'$ .

HEWELSFIELD, a parish in Gloucestershire, 6 m. NNE of Chepstow. Area 1,189 acres. Pop. in 1851, 487.

HEWISH, a parish in Wilts, 3 m. NNW of Pewsey. Area 754 acres. Pop. in 1851, 159.

HEWORTH, a chapelry of Durham, 2 m. ESE of Gateshead. Area 2,853 acres. Pop. in 1831, 5,424; in 1851, 8,869, employed in potteries, rope-works, and ship-building.

HEX, a commune and village of Belgium, in the prov. of Limburg, cant. of Looz. Pop. 392.

HEXAMILIA, a village of Greece, in the nom. of Corinth, on the site of the ancient town of that name, at a spot where the isthmus is 6 m. wide. In the neighborhood are the ruins of a temple, a theatre, a stadium, and some ramparts.

HEXHAM, a parish of Northumberland, intersected by the Carlisle and Newcastle railway, on which there is here a station, 20 m. from Newcastle,

and  $39\frac{3}{4}$  from Carlisle. It is about  $11\frac{1}{2}$  m. in length, and 6 m. in breadth; and has an area of 28,370 acres. Pop. in 1831, 6,042; in 1851, 6,537. The valleys, in general, are rich and highly cultivated; but the high quarter of the p. is a large, wild, and mountainous district, extending from 6 m. SW of the town of H. to the borders of the co. of Durham. The H. poor-law union comprehends 69 parishes, embracing an area of 318 sq. m.; with a pop. returned, in 1831, at 27,271; in 1851, at 30,436. The average annual expenditure on the poor of this district, during the three years preceding the formation of the union, was £8,903; expenditure, in 1839, £7,491; in 1847, £7,891. In this parish are the castles of Prudhoe, Chipchase, Ayden, Langley, and Haughton; the towers of Fenwick, Halton, and Bywell; the halls of Wallwick, Beaufort, and Dilston; the villas of Spital, Hermitage, and Brunton; and many other beautiful seats.

HEXHAM, an ancient market-town in the above parish, and once the see of a bishop,  $20\frac{1}{2}$  m. W of Newcastle, 40 m. E of Carlisle, and 279 m. NNW of London, is delightfully seated along the sides of a low eminence whose sides slope down to the plain of the Tyne, which flows past the town about 150 yds. to the S, a mile below the confluence of its two great branches, the North and South Tyne. It is irregularly built, and the streets are narrow, except a few of the principal ones. In the outskirts of the town, on the SW, there are a number of neat houses in modern style. The quarter-sessions for Northumberland are held here annually in the first week after July 7th, in their course with Alnwick, Morpeth, and Newcastle. H. is a polling-place, and the principal place of election, for the S division of Northumberland. It has long been famous for its manufacture of leather, particularly gloves, of which about 24,000 dozens of pairs are made and exported annually, giving employment to about 1,000 women and girls, and 120 men and boys. Not less than 80,000 raw skins are used here yearly, besides about 18,000 skins of dressed leather. There are four tanneries in the town, in which upwards of 20,000 calf and sheep skins and hides are dressed every year. The making of stuff hats is another considerable branch of trade; and there are also two worsted manufactories, and a variety of trades. Immense quantities of vegetables are sent from H. to the Newcastle markets.

[*Ancient diocese and see.*] The episcopal dignity of H. was derived from Wilfrid, a Northumbrian by birth, and educated at the monastery of Lindisfarne. The famous St. Cuthbert was the third bishop of H. The 12th and last bishop, Tydfert, died in 821. In 876, H. was completely destroyed by the terrific sea-kings of the Baltic; and about a year after was appropriated, together with Holm, to the formation of a prebendal stall in York cathedral. In the 36th of Henry VIII. the archb. of York exchanged H. for other abbey lands, retaining nothing but episcopal jurisdiction.—The cathedral, or abbey-church, is the greatest ornament and boast of the town. It is in the form of a cross, with a square tower rising from the centre to the height of 90 ft. The transept is 156 ft., and the choir upwards of 79 ft., in length; but the appearance of the building is much injured by the want of a nave. The interior presents "one lofty aisle, open on all sides, grand in its pristine nakedness; pleasing in its simplicity; and astonishing in the magnitude of its proportions, and the unity of its parts. At equal distances from the centre, four light and lofty arches spring from as many masses of tall clustered columns supporting the tower, and opening into each division of the edifice." The choir, which is now used as the parish-church, consists of one aisle divided into three. The abbey, formerly the seat of the Beaumont family, occupies the site of the ancient monastery, and is separated from the church, on the W side, by the space on which the cloisters were built.

[*History.*] The battle of Hexham Levels, which for some time decided the important contest of the rival Roses, was one of the most remarkable events connected with the history of this interesting town. The contest took place on the 14th of May, when victory declared for the army of Edward. The inhabitants of H. were staunch loyalists during the civil wars; and their attachment to the house of Stuart was conspicuous during the rebellions of 1715 and 1745. A direful commotion occurred here on the 9th



of March, 1761, in consequence of the newly-established regulations for raising the militia.

**HEXHAMSHIRE**, a district of Northumberland comprising the parishes of Hexham, Allendale, and St. John Lee, in the S division of Tyndale ward. This district anciently constituted a regality, county-palatine, and diocese; but it was united, *quoad civilia*, to the co. of Northumberland, by act 14<sup>th</sup> Elizabeth, cap. 13. It had been previously held, both as a regality and a diocese, by the bishop of Hexham.

**HEXTON**, a parish and village in Hertfordshire, 6 m. NW by W of Hitchin. Area 1,453 acres. Pop. in 1831, 294; in 1851, 278.

**HEYBRIDGE**, a parish in Essex, 1 m. N of Maldon, on the Pant, and intersected by a navigable canal which joins the river Chelmer. Area 2,136 acres. Pop. in 1831, 1,064; in 1851, 1,330. Here are large salt-works. H. unites with Maldon in the election of 2 members of parliament.

**HEYCOURT**, a village of France, in the dep. of Meuse, cant. and 6 m. SW of Vaubecourt. Pop. 1,360.

**HEYD**, a department and commune of Belgium, in the prov. of Luxemburg, arrond. of Marche. Pop. of dep., 715; of com., 435.

**HEYDE**, a commune of Belgium, in the prov. of East Flanders, dep. of Berlaere. Pop. 281.—Also a com. in the prov. of Brabant, dep. of Cortenacken. Pop. 104.—Also a com. in the prov. of Antwerp, dep. of Desschel. Pop. 235.—Also a com. in the prov. of Liege, dep. of Homburg. Pop. 630.—Also a com. in the prov. of Antwerp, dep. of Leest. Pop. 400.—Also a commune in the prov. of Brabant, dep. of Lubbeek. Pop. 181.—Also a com. in the same prov., dep. of Neerlinter. Pop. 247.—Also a com. in the prov. of East Flanders, dep. of Oost-Eecloo. Pop. 230.—Also a com. in the prov. of Brabant, dep. of Steenuffel. Pop. 220.—Also a com. in the prov. of Antwerp, dep. of Veerle. Pop. 225.—Also a com. in the prov. of East Flanders, dep. of Wichelen. Pop. 288.

**HEYDE (KLYN)**, a commune of Belgium, in the prov. of Antwerp, dep. of Stegem. Pop. 186.

**HEYDEKANT**, a commune of Belgium, in the prov. of Limburg, dep. of Berbroek. Pop. 214.

**HEYDEKAPELLE**, a commune of Belgium, in the prov. of East Flanders, dep. of Waesmunter. Pop. 126.

**HEYDON**, a parish in Norfolk, 5 m. W by N of Aylsham. Area 1,942 acres. Pop. in 1851, 300.

**HEYDUKES**. See **HAIDUCKS**.

**HEYENDE**, a commune of Belgium, in the prov. of East Flanders, dep. of Lokeren. Pop. 688.

**HEYERSUM**, a village of Hanover, in the princip. and 6 m. W of Hildesheim. Pop. 220. There are large salt works here.

**HEYFORD (NETHER)**, a parish in Northamptonshire, 7 m. W by S of Northampton, in the line of the London and Birmingham railway, and crossed by the Grand Junction canal. Area 1,690 acres. Pop. in 1831, 507; in 1851, 624.

**HEYFORD-PURCELL**, a parish in Oxfordshire, 4½ m. SSE of Deddington, on the banks of the Cherwell. Area 1,650 acres. Pop. in 1851, 605.

**HEYFORD-WARREN**, a parish in Oxfordshire, 6 m. NW by W of Bicester, on the E bank of the Cherwell. Area 1,300 acres. Pop. in 1851, 399.

**HEYHOEK**, a commune of Belgium, in the prov. of East Flanders, dep. of Cruybeke. Pop. 200.—Also a commune in the prov. of Brabant, dep. of Hever. Pop. 126.—Also a com. in the prov. of East Flanders, dep. of Lembeke. Pop. 201.

**HEYHOEK**, or **BANHENSCHOEK**, a commune of Belgium, in the prov. of East Flanders, dep. of Nieuwerkerken-Waes. Pop. 350.

**HEY-HOUSES**, a township in Whalley p., Lancashire, 4 m. SE of Clithorpe. Area 320 acres. Pop. in 1831, 155; in 1851, 147.

**HEYKANT**, a commune of Belgium, in the prov. of Antwerp, dep. of Esschen. Pop. 215. Also a com. in the same prov., dep. of Herenthout. Pop. 166.—Also a com. in the same prov., dep. of Mariekerke. Pop. 206.—Also a com. in the prov. of Brabant, dep. of Rotselaer. Pop. 225.—Also a com. in the prov. of East Flanders, dep. of Zell. Pop. 779.

**HEYKEN**, a commune of Belgium, in the prov. of Brabant, dep. of Hever. Pop. 118.—Also a com. in the prov. of Antwerp, dep. of Loenhout. Pop. 169.

**HEYKEN-EN-WOLFELAER**, a commune of Belgium, in the prov. of East Flanders, dep. of Waesmunter. Pop. 192.

**HEYL**, a river in Cornwall, formed by the union of several streams near St. Erth-bridge. From this point it pursues a N course; and, at its mouth, after being joined by a brook from the E, forms a broad estuary opening into the bay of St. Ives. It is 11 m. in length, 2½ m. of which are tidal.

**HEYLAER**, a commune of Belgium, in the prov. of Antwerp, dep. of Beerasse. Pop. 151.

**HEYMA**, one of the Westmanna isles, off the S coast of Iceland, in N lat. 63° 14'. It is the largest of the group, 6 m. in length, and about 3 m. in breadth.

**HEYMELAERE**, a commune of Belgium, in the prov. of West Flanders, dep. of Moorslede. Pop. 740.

**HEYMOLEN**, or **KATTENHEY-ET-WEYERSTRAET**, a commune of Belgium, in the prov. of East Flanders, dep. of Saint-Nicolas. Pop. 208.

**HEYNA**, a town of Saxe-Coburg-Gotha, in the princip. and 9 m. WNW of Gotha, on the r. bank of the Nesse. Pop. 364.

**HEYNDONCK**, a department and commune of Belgium, in the prov. of Brabant, arrond. of Malines, on the Rupel. Pop. 600.

**HEYNE**, a commune of Belgium, in the prov. of East Flanders, dep. of Capryck. Pop. 233.

**HEYOP**, a parish in Radnorshire, 3¼ m. WNW of Knighton, on the river Teme. Pop. in 1851, 243.

**HEYPLASCH**, a commune of Belgium, in the prov. of East Flanders, dep. of Lede. Pop. 173.

**HEYRIEUX**, a canton and town of France, in the dep. of Isere, 11 m. NE of Vienne. Pop. of cant., 12,402; of town, 1,424.

**HEYSHAM**, a parish and village in Lancashire, 4½ m. W of Lancaster, on a peninsula between the bay of Morecambe and the estuary of the Loyne. Area 1,704 acres. Pop. in 1831, 582; in 1851, 593.

**HEYSHOT**, a parish in Sussex, 2½ m. SSE of Midhurst, on the Rother. Area 2,171 acres. Pop. in 1831, 358; in 1851, 432.

**HEYST-OP-DEN-BERG**, a canton and town of Belgium, in the prov. of Antwerp, 12 m. ENE of Malines. Pop. of cant., 6,902.

**HEYSTRAET (KUYLDAM-ET)**, a commune of Belgium, in the prov. of East Flanders, dep. of Saint-Nicolas. Pop. 149.

**HEYESBURY**, a parish and borough in Wilts., 4 m. ESE of Warminster, on the borders of Salisbury-plain, and on the N bank of the river Wilby. Area 3,380 acres. Pop. in 1801, 1,072; in 1831, 1,412; in 1851, 1,210. The borough is chiefly comprised in one street. It returned 2 members to parliament, until disfranchised by the reform act. There is a large and well-endowed hospital here.—H. is an ancient town. In old records it is called Heightsbury, and the name has also been variously written Hatchbury and Haresbury. A great part of it was burnt down in 1776. It gives the title of baron to the family of A'Court, whose heirs-male formerly held the baronetcy of A'Court.

**HEYTHORPE WITH DUNTHORPE**, a parish in

Oxfordshire, 3 m. E by N of Chipping-Norton. Area 1,664 acres. Pop. in 1831, 123; in 1851, 190.

HEYTHUYSEN, a village of Dutch Limburg, arrond. and 6 m. NW of Ruremonde. Pop. 1,279.

HEYVOORT, a commune of Belgium, in the prov. of Antwerp, dep. of Olmon. Pop. 152.

HEYWOOD-IN-HEAP, a chapelry and extensive village in Bury parish, Lancashire, 8 m. NNW of Manchester, and 42 m. E by N of Liverpool. Area 2,240 acres. Pop. in 1801, 4,283; in 1831, 10,429; in 1851, 16,048. The Manchester and Leeds railway, and the Rochdale canal, intersect the chapelry and township, passing 1½ m. to the E of the town, to which a branch railway has been formed. The cotton manufacture is the staple trade; the village being situated at an easy distance from Manchester, and plentifully supplied with coal from the numerous pits in the neighbourhood. There are numerous steam-engines employed in moving machinery and power-looms in manufacturing woollen-cloth, spinning fine cottons, making paper, constructing wheels, &c.

HEYWYK, a commune of Belgium, in the prov. of East Flanders, dep. of Meirelbeke. Pop. 591.

HEYZYDE, a commune of Belgium, in the prov. of Antwerp, dep. of Turnhout. Pop. 140.

HEZ (SUR-LES), a commune of Belgium, in the prov. of Liege, dep. of Saive. Pop. 156.

HEZE, a commune of Belgium, in the prov. of Brabant, dep. of Grez-Doiceau. Pop. 508.

HIA, a town of China, of the third rank, in the dep. of Keai-tchau, prov. of Shan-si, 50 m. NE of Pou. in N lat. 35° 10'.

HIA-KIANG, a town of China, of the third rank, in the dep. of Len-Kiang-fu, prov. of Kiang-si, on the l. bank of the Kan-Kiang, 30 m. N of Kin-ghan, in N lat. 27° 32', E long. 115° 14'.

HAL-CHE, a city of China, of the second rank, in the prov. of Quang-si, in N lat. 22° 10'.

HIA-LOUI-CHU, a city of China, of the second rank, in the prov. of Kwang-si, on an affluent of the Hong-Kiang, 42 m. NW of Tai-ping, in N lat. 22° 54', E long. 106° 34'.

HIANG-HO, a town of China, of the third rank, in the dep. of Chun-thien-fu, in N lat. 39° 46', E long. 117° 12'.

HIANG-WOU-CHU, a city of China, of the second rank, in the prov. of Kwang-si, in N lat. 23° 12', E long. 106° 45', on an affluent of the Ngv-ou-Kiang, 30 m. SSE of Tchín-ngan.

HIAO-FUNG, a town of China, of the third rank, in N lat. 30° 30', E long. 119° 36'.

HIAO-Y, a town of China, of the third rank, in N lat. 37° 10', E long. 111° 45'.

HIAQUI, a river of Mexico, which rises on the borders of Chihuahua and Sonora; runs SSW and then W; and enters the gulf of California at the village of Huiribis, after a course of about 350 m. Its banks produce abundant harvests of maize, French beans, a kind of pease, and lentiles.

HIARNOE, an island of Denmark, off the E coast of Jutland, at the entry of Horsens bay. Pop. 115.

HIA-Y, a town of China, of the third rank, in the dep. of Kouei-te-fu, prov. of Ho-nan, 30 m. SSE of Koué-ti, in N lat. 34° 20'.

HIBALDSTOW, a parish of Lincolnshire, 4 m. SSW of Glandford-Brigg. Area 4,390 acres. Pop. 801.

HIBBE. See GIBBE.

HIBBERT, a township in the Huron district of Upper Canada, intersected by an affluent of the Bayfield. Pop. in 1842, 95.

HIBBS (POINT), an elevated and projecting cape on the W coast of Van Diemen's Land, in S lat. 42° 39'.

HIBORNTIA, a village in Callaway co., in Missouri, U. S., 1 m. N of Jefferson.—Also a v. in Clarke co., in Iowa.

HICKES'S BAY, a bay on the NE coast of New Zealand, in S lat. 37° 42', 14 m. WNW of Cape Runaway.

HICKES'S KEYS, a cluster of islets and rocks in the bay of Honduras, near the coast of Mexico, in N lat. 17° 10'.

HICKES'S POINT, a cape on the SE coast of Australia, in S lat. 38° 0', E long. 148° 53'.

HICKLETON, a parish in the W. R. of Yorkshire, 6 m. SW of Doncaster. Area 1,047 acres. Pop. 143.

HICKLING, a parish in Norfolk, 9½ m. ESE of North Walsham. Area 4,334 acres. Pop. in 1831, 762; in 1851, 812.—Also a p. in Nottinghamshire, 11 m. SE of Nottingham, on a branch of the Smite, and intersected by the Grantham canal. Area 2,930 acres. Pop. in 1831, 529; in 1851, 618.

HICKMAN, a county in the central part of the state of Tennessee, U. S., comprising an area of 750 sq. m., watered by Duck river and its branches. Pop. in 1840, 8,618, of whom 1,379 were slaves. Its cap. is Centerville.—Also a co. in the SW part of the state of Kentucky, comprising an area of 350 sq. m., drained by Little Obion river and its branches, and by Bayou Desha creek. Pop. 8,968, of whom 1,615 are slaves. Its cap. is Clinton.

HICKORY, a township of Mercer co., in the state of Pennsylvania, U. S. Pop. in 1840, 1,831.

HICKORY-GROVE, a village in Warren co., in the state of Missouri, U. S., 81 m. ENE of Jefferson city. Pop. in 1840, 828.

HICKORY-TOWN, a village of Plymouth township, Montgomery co., in the state of Pennsylvania, U. S., 101 m. E of Harrisburg.

HICKSVILLE, a village in Greenville co., in the state of Virginia, U. S., 62 m. S of Richmond, on the SW side of Meherrin river, a branch of Chowan river, which, at a little distance from the v., is crossed by the Petersburg railroad.—Also a v. of Oyster bay township, Queen's co., in the state of New York, U. S., on the Long Island railway.—Also a v. of William's co., in the state of Ohio, 177 m. NW of Columbus. Pop. in 1840, 67.

HIDANG, a fort of Hindostan, in the state of Nepaul, district and 80 m. NNE of Khatang, and 100 m. E of Khatmandu, near the r. bank of the Arun.

HIDCOAT-BATRIM, a hamlet in the p. of Mickleton, Gloucestershire. Pop. in 1851, 109.

HIDDA, a village of Afghanistan, 5 m. S of Jellalabad, remarkable for its ropes, mounds, caves, and other remains of unknown antiquity.

HIDDEN-SOE, or HIDDENSE, an island of Prussia, in the prov. of Pomerania, regency and 12 m. N of Stralsund, circle and 15 m. WNW of Bergen, in the Baltic, to the W of the island of Rugen, from which it is separated by Frogg strait. Pop. 500. It is 11 m. in length, but does not exceed 1½ m. in breadth. Its soil is sandy, and affords good pasturage, but is completely destitute of wood. Yellow amber is found in considerable quantities on its shores. It contains 4 villages, of which Kloster is the principal. Fishing and the manufacture of linen form the chief branches of local industry. The language spoken in this island consists of a melange of Danish, Swedish, and Teutonic words.

HIDDIR, or HADRAR (JEREL), a mountain-range in Morocco, running S from the town of that name, and forming the S branch of the Atlas chain. It presents rounded and verdant summits, and abounds, it is reputed, in iron.

HIDE (EAST AND WEST), or HYDE, a hamlet in the p. of Luton, Bedfordshire. Pop. 662.

HIDE (WEST), a parochial chapelry in the p. of

Stoke-Edith, Herefordshire, 7 m. ENE of Hereford. Area 950 acres. Pop. in 1831, 196; in 1851, 174.

**HIDJELLEE**, **HIJALA**, or **INJELLEE**, a town and pergunnah of Hindostan, properly in the prov. of Orissa, but generally included in that of Bengal, and district of Hugli, 66 m. SSW of Calcutta, on the l. bank of the embouchure of the Hugli, at the confluence of a river of the same name, in N lat.  $21^{\circ} 50'$ , E long.  $88^{\circ} 4'$ . It occupies an important but insalubrious situation, and is now but rarely touched at by vessels. A portion of the surrounding district is defended from inundation by embankments carried along the banks of the numerous streams by which it is intersected, and is extremely fertile, producing rice, betel, and cocoa-nuts, in great abundance. Other parts, distinguished as the *dums*, or salt land, are left exposed to the periodical incursion of the tides, for the purposes of the salt-manufacture. This place was taken and fortified by the English in 1687, but a treaty of peace having been entered into with Aurang-Zeyb, they quitted it after the short period of 3 months, half of their forces having perished from its insalubrity.

**HIDVEG**, a village of Transylvania, in the comitat of Upper Weissenburg, near the r. bank of the Aluta, 15 m. N of Cronstadt. It is of considerable extent, and is noted for its dye-works.

**HIDVEG-RABA**, a town of Hungary, in the comitat of Eisenburg, 14 m. SSE of Steinamanger.

**HIELM**, a small island of Denmark, in the Cattegat, near the coast of Jutland, in N lat.  $56^{\circ} 8'$ , E long.  $10^{\circ} 49'$ , 3 m. distant from the peninsula of Ebeltoft.

**HIELMAR**, or **HJELMAR**, a lake in the central part of Sweden, in the laen of Örebro, intersected by the parallel of  $59^{\circ} 15' N$ . It is about 40 m. long from E to W, but of small comparative width. Its waters communicate with the Mälär lake by a rapid torrent; but, for the purpose of navigation, a canal has been led from the N bank of the lake, a little to the W of Oja, to the Arboga-an, which flows into the W end of the Mälär lake.

**HIELMELAND**, a parish and village of Norway, in the bail. and 21 m. NE of Stavanger. Pop. 2,485.

**HIEINHEIM**, a village of Bavaria, on the l. bank of the Danube, 7 m. SW of Kelheim. Pop. 600.

**HIEIN-NING**, a town of China, in the dep. of Wu-chang-fu, prov. of Hou-pe, in N lat.  $29^{\circ} 55'$ .

**HIEIN-YANG**, a town of China, in the prov. of Shen-si, 15 m. NW of Si-an, in N lat.  $34^{\circ} 20'$ , E long.  $108^{\circ} 38'$ .

**HIEOU-NING**, a town of China, of the third rank, in the prov. of Hou-pe, in N lat.  $29^{\circ} 53'$ , 60 m. S of Han-yang.

**HIERDAL**, a parish and village of Norway, in the bail. of Bradsberg, 112 m. NNE of Christiansand. Pop. 2,850.

**HIERES**. See **HYERES**.

**HIERRO**. See **FERRO**.

**HIERS**, a commune of France, in the dep. of Charente-Inferieure, cant. of Marennes. Pop. 815.

**HIERSUC**, a canton and village of France, in the dep. of Charente, arrond. of Angoulême. Pop. of cant. 10,045; of v. 621.

**HIEZING (MARIA)**, a village of Lower Austria, 3 m. SW of Vienna, on the Vienne. Pop. 2,000. Its environs are thickly studded with summer-villas of the citizens of Vienna.

**HIGANQUET**, a town on the E coast of the island of Mindanao, in N lat.  $9^{\circ} 26'$ .

**HIGGANUM**, a village of Haddam township, Middlesex Co., in the state of Connecticut, U. S., 21 m. S of Hartford, on Connecticut river.

**HIGGINS (POINT)**, a cape on the W coast of N.

America, in N lat.  $55^{\circ} 27'$ , forming the NW point of the N entrance into the Canal de Revilla-Gigedo.

**HIGGINSPOET**, a village of Lewis township, Brown co., in the state of Ohio, U. S., 124 m. SSW of Columbus, on the N bank of the Ohio, below the confluence of the White Oak river.

**HIGHAM**, a hamlet in Shirland p., Derbyshire. Pop. 417.—Also a parish in Kent,  $4\frac{1}{2}$  m. NNW of Rochester, S of the Thames, and crossed by the Thames and Medway canal. Area 3,155 acres. Pop. in 1831, 703; in 1851, 843.—Also a p. in Suffolk, 5 m. S of Hadleigh, at the confluence of the Bret with the Stour. Area 880 acres. Pop. in 1831, 260; in 1851, 292.

**HIGHAM-FERRERS**, a parish and borough in the co. of Northampton, 16 m. ENE of Northampton, and 65 m. NNW of London. Area of p. 2,260 acres. Pop. in 1831, 965; in 1851, 1,140.—The town stands on a rocky elevation abounding in springs, and consists of two streets and a market-place. The church is one of the most handsome in a co. distinguished for the beauty of its ecclesiastical structures. The borough returned 1 member to parliament till disfranchised by the reform act. Lace-making, which formerly flourished here, has gone to decay since the introduction of machinery.

**HIGHAM-GOBION**, a parish in Bedfordshire,  $11\frac{1}{2}$  m. SSE of Bedford, and about 6 m. SW of Shefford. Area 1,287 acres. Pop. in 1851, 134.

**HIGHAM-GREEN**, a hamlet in Gazeley p., Suffolk. Area 3,200 acres. Pop. 343.

**HIGHAM-ON-THE-HILL** with **LINDLEY**, a parish in Leicestershire,  $3\frac{1}{2}$  m. NW of Hinckley, intersected by the Ashby-de-la-Zouch canal. Area 2,880 acres. Pop. in 1831, 560; in 1851, 544.

**HIGHBRAY**, a parish in Devonshire,  $8\frac{1}{2}$  m. NE of Barnstaple. Area 4,273 acres. Pop. in 1851, 223.

**HIGHBRIDGE**, a village in Somersetshire, on the Bristol and Exeter railway, 7 m. N of Bridgewater.

**HIGHCLERE**, a parish in Southampton,  $7\frac{1}{2}$  m. NNW of Whitechurch. Area 3,391 acres. Pop. 525.

**HIGH-CROSS**, a summit on the borders of Leicestershire and Warwickshire,  $5\frac{1}{2}$  m. NW of Lutterworth.

**HIGH FALLS**, a village of Marbletown township, Ulster co., in the state of New York, U. S., 69 m. S of Albany, on Rondout creek, and on the Delaware and Hudson canal. Pop. 200.

**HIGHGATE**, a chapelry and populous village in the ps. of Hornsey and St. Pancras, Middlesex,  $4\frac{1}{2}$  m. NNW of St. Paul's, delightfully situated on the summit and sides of one of the highest hills in the co., rising 400 ft. The pop. of H. is returned with the respective ps. in which the v. is situated. H. comprises many elegant villas, the seats of opulent merchants in the metropolis. In 1839, a spacious and tasteful cemetery, having an area of about 20 acres, was formed here.

**HIGHGATE**, a township of Franklin co., in the state of Vermont, U. S., 71 m. NW of Montpelier, on the E side of Lake Champlain, watered by Missisque and Rock rivers. Pop. 2,292.

**HIGHLAND**, a county in the state of Ohio, U. S., comprising an area of 555 sq. m., between Scioto and Miami rivers, and watered by Paint and Brush creeks, and the E fork of Miami river. Its surface is elevated, and its soil generally fertile. Pop. in 1840, 22,269. Its capital is Hillsboro'.—Also a village of Jackson co., in the state of Tennessee, 69 m. ENE of Nashville, on the W side of Cumberland river.—Also a village of Fairfield township, Highland co., in the state of Ohio, 50 m. SW of Columbus, on Lee's creek. Pop. 250.—Also a township of Oakland co., in the state of Michigan, 45 m. NW of Detroit. Pop. 566.—Also a village of Vermilion co., in the



state of Indiana, 72 m. W of Indianapolis. Pop. 1,653.

**HIGHLAND MILLS**, a village of Monroe township, Orange co., in the state of New York, U. S., 97 m. SSW of Albany, consisting in 1840 of about 25 dwellings.

**HIGHLANDS (THE)**, a thinly inhabited division of Scotland, comprehending somewhat more than one-half of its surface, and remarkable for the peculiar character of its ancient inhabitants and history, and for a pervading mixture of wildness, beauty, and sublimity in its scenery. To define the limits of the H., or rather to trace the boundary-line with the Lowlands, requires a previous fixation of the differential or characteristic features of the region. If by the H. be meant the territory commensurate with the use of the Gaelic language, and with marked vestiges of ancient Celtic manners, the limits must include considerable districts in the present day, such as the isle of Bute, and large tracts in the shires of Dumbarton, Perth, Forfar, and Aberdeen, which were undoubtedly included at comparatively a very modern date. If *high lands*, in the literal signification of the words, be understood, the broad mountain-belts S of the Forth, and S and E of the Clyde, though sometimes popularly called the Southern H., were never included by community of peculiar name or history or manners in the H. properly so designated, and stand far apart from them in geographical position; while, on the other hand, the stretches of low country which intervene amongst the H. mountains, and in some instances—as in Dumbartonshire and Caithness—come down from these mountains in gentle slopes to points where they are terminated by a great natural barrier, never were included in the Lowlands. Though, with these exceptions, mountainousness of surface, and the perpetuation to the present day of the Celtic language and some Celtic usages distinctively characterize the whole H., yet the definition of the territory which best suits the purposes of history, and in all respects most nearly accords with those of political and moral geography, is one which makes it commensurate with the country or locations of the ancient H. clans. This definition assigns to the H. all the continental territory N of the Moray frith, and all the territory, both insular and continental, W of an easily traceable line from that frith to the frith of Clyde. The line commences at the mouth of the river Nairn; it thence, with the exception of a slight NE or outward curve, the central point of which is on the river Spey, runs due SE till it strikes the river Dee at Tullach, nearly on the 3d meridian of long. W of Greenwich; it then runs generally S till it falls upon West-water, or the southern large head-water of the N. Esk; it thence, over a long stretch, runs almost due SW, and with scarcely a deviation, till it falls upon the Clyde at Ardmore, in the p. of Cardross; and now onward to the Atlantic ocean, it moves along the frith of Clyde, keeping near to the continent, and excluding none of the Clyde islands except the comparatively unimportant Cumbraes. All the Scottish territory W and NW of this line is properly the H. Yet both for the convenience of topographical description, and because, altogether down to the middle of the 13th cent., and partially down to the middle of the 16th, the H. and the Western islands were politically and historically distinct regions, the latter are usually viewed apart under the name of the Hebrides. See article **HEBRIDES**. The mainland H., or the H. after the Hebrides are deducted, extend in extreme length from Duncansby-head or John o'Groats on the N, to the Mull of Kintyre on the S, about 250 m.; but over a distance of 90 m. at the N end, they have an average breadth of only about 45 m.; over a distance of 50 or 55 m. at the

S end, they consist mainly of the Clyde islands, and the very narrow peninsula of Kintyre; and even at their broadest part, from the E base of the Grampians on the E to Ardnamurchan-point on the W, they scarcely if at all extend to more than 120 m. The district comprehends the whole of the cos. of Caithness, Sutherland, Ross, Cromarty, Inverness, and Argyle, the large parts of Nairn, Perth, Dumbarton, and Bute, and considerable portions of Elgin, Banff, Aberdeen, Forfar, and Stirling. Those cos., all of which are comprehended—with the exception of Caithness, and the addition of the Perthshire and Dumbartonshire sections—contain, in a geographical or physical point of view, nearly all the territory and the scenic features which are strictly Highland.

*General features.* A district so extensive can be but faintly pictured in a general and rapid description. Mountains, chiefly covered with heath or ling, but occasionally, on the one hand, displaying sides and summits of naked rock, and on the other exhibiting a dress of verdure, everywhere rise at short intervals, in chains, ridges, groups, and even solitary heights. Their forms are of every variety, from the precipitous and pinnacled acclivity, to the broad-based and round-backed ascent; but in general are sharp in outline, and wild or savagely grand in feature. Both great elongated ridges, and chains or series of short parallel ridges, have a prevailing direction from NE to SW, and send up summits from 1,000 to upwards of 4,000 ft. above the level of the sea. Glens, valleys, and expanses of lowland, stretch in all directions among the mountains, and abound in voluminous streams and large elongated lakes of picturesque and magnificent appearance,—nearly all the inland lakes extending in stripes either NE and SW, or E and W. Along the whole W coast, at remarkably brief intervals, arms of the sea, long, narrow, and sometimes exceedingly rugged in outline, run NE or SE into the interior, and assist the inland fresh water lakes in cleaving it into sections. The rivers of the region are chiefly impetuous torrents, careering for a while along mountain-gorges, and afterwards either expanding themselves into beautiful lakes and flowing athwart delightful meadows, or ploughing narrow and far-stretching valleys. Native woods, principally of pine and birch, and occasionally clumps and expanses of plantation, climb the acclivities of the gentler heights, or crowd down upon the valleys, and embosom the inland lakes. On the E side, along the coast to the Moray frith, and toward the frontier in the cos. of Nairn, Elgin, and Perth, gentle slopes and broad belts of lowland, fertile in soil and favourable in position, are carpeted with agricultural luxuriance, and thickly dotted with human dwellings, and successfully vie with the S of Scotland in towns and population, and in the pursuit and display of wealth. But almost everywhere else, except along Loch-Fyne, and the S shore of Loch-Etive, the H. are sequestered,—a semi-wilderness, where a square mile is a greatly more convenient unit of measurement than an acre.

*Population, &c.* The H., till less than a century ago, were exclusively occupied by a people whose manners, language, and framework of society were strikingly peculiar, and quite as different from those of the inhabitants of the S of Scotland as if the two races had been separate nations, mutually removed by the intervention of an ocean. The transition of the Highlanders from their ancient moral and social condition to a state of enlightenment and of begun community of character and interests with the inhabitants of the Lowlands, did not commence till the 18th cent. Two years after the quelling of the last rebellion, or in 1748, two acts were passed, and an old one revived, with a view of entirely destroying

the clan-system of the Highlanders. One of the new acts abolished hereditary jurisdictions; the other proscribed the use of the Highland dress. The Highland peasantry were now made masters of their own actions; and in numerous instances the chieftains—now converted into plain landed proprietors—came down with true dignity of character from their barbarous grandeur to the morally great position of cultivators of the soil and encouragers of an industrious tenantry in the valley.—But the beneficial effects of obliging the pop. to employ themselves chiefly as husbandmen and graziers could never, to any considerable degree, have been realized, had not the country been laid open by facilities of communication. The H., in their original state, were almost utterly inaccessible from without, and were traversable within their own limits only by the light-footed pedestrian, bearing no heavier a load than the accoutrements of war. During the rebellion of 1715, when the royal troops made a vain attempt to penetrate farther than Blair-Athol, government began to see the necessity of cutting paths through the mountain-fastnesses even as a measure of national police. In 1730, several great lines of road were commenced,—one from Luss, both by the head of Lochlomond and by Inverary, to Tyndrum,—another from Calander, near Stirling, to the same point,—another, in continuation of these, from Tyndrum, through Glencoe, to Fort-William, and thence along the great glen to Fort-George,—another from Cupar-Angus by Braemar to Fort-George,—and another from Crieff and from Dunkeld by Dalnacardoch and Dalwhinnie, to Fort-Augustus and Inverness. So great a social and moral revolution as the formation of the H. roads has gradually accomplished cannot easily be conceived. Regular carriers have for a considerable period been established on all the principal roads, carrying goods at all seasons of the year; and the communication of intelligence by letters and newspapers, or the working of the post-office system, is the same on all the great lines of road as in the Lowlands.—But a prodigious addition to what the roads have effected, is found in the results of cutting the Crinan canal, and of constructing the magnificent work called the Caledonian canal; and the great lines of railway skirting the E coast from Edinburgh to Aberdeen, and the W coast from Glasgow to Ayr. As regards also the whole coast-line of the continental H., the whole length of the Great glen, and the entire extent of the Western islands, improvement has been achieved probably much more by the constructing and amending of harbours, introduction and exploits of steam-navigation, than in other districts by all sorts of wheeled conveyances along the roads. Parts adjacent to the Clyde, and to the principal ramifications of its estuary, and portions of the W coast and of the islands, have, with the simple appliance of steam-navigation, suddenly passed from a state of wildness and desolation to the possession of almost a suburban character. Large villages or little towns—as in the instances of Helensburgh, Dunoon, Campbelltown, Bowmore, and Oban—have either sprung up from the unoccupied soil, or arisen out of poor and inconsiderable hamlets. The consequent and continuous increase of traffic, not only by the new method of steam-navigation and railways, but by the old one of sailing-vessels, has been proportionate to the gigantic movements of everything connected with H. amelioration.—Certain patriotic institutions have likewise operated powerfully to rouse the mind of the Highlander from its dormancy, and incite and direct him to avail himself of the advantages which were accumulating round his position. No surer criterion of the vast amount of agricultural improvement which has taken place can be

found—even abating for the advantageous influence of the war period upon landed property—than in the fact that the value of Highland estates has undergone a fourfold, a sixfold, and in some instances nearly a tenfold increase.

*Agriculture and manufacture.*—Owing to the very great extent of surface which is available only as grazing-ground and sheep-walk, much of the attention which was anciently paid in an engrossing way to stock required to be perpetuated and enlightened. Great effort and skill have been employed in improving the black cattle by diffusing over the region the best breeds of its choicest districts, and by importing cows from Ayrshire. The H. cattle are small; but they furnish the shambles with beef of a peculiarly delicate quality; and are driven southward for sale to the number annually of about 20,000 from Inverness-shire, and about the same number from the other northern counties, and of a still larger number from the southern Highlands.—Besides due care being used, on account of the very fine flavour of its mutton, for the black-faced sheep which the commencement of the improving era found in possession of the sheep-walks, attention is universally given on account of the fineness of their wool and the largeness of their size, to imported cross-breeds, and especially to the Cheviots. Considerable attention has been paid to the breed of horses, for the purposes both of tillage and of draught, and has even in some instances been successfully directed to the rearing of horses of the finest description. Highland ponies are small, but strong, hardy, and capable of enduring great fatigue; and are annually driven southward in large numbers for the uses of the Newcastle coal-mines, and for general disposal in the Lowland and the English markets. For the disposal of stock, various trysts or markets are held in the interior, and along the southern borders of the region. To supersede the inconveniences of a scattered market, and of purchasers having sometimes to seek out their commodity at the homes and fanks of the farmers, a great annual sheep and wool market was established in 1817 at Inverness; and here all the disposable fleeces and sheep in the N of Scotland are usually sold or contracted for in the way of consignment. The manufactures of the H.—excepting in the annual production of about 11,000 or 12,000 tons of kelp, about £200,000 worth of whisky, and an inconsiderable quantity of hempen cloth—are so trivial as to be seen or estimated only by a minute statist. In commerce, however, or in the exportation of the produce of the soil and of the seas, and in the importation of the conveniences and the luxuries of life, the region exhibits an increase of importance quite sufficient to demonstrate that a process of enrichment, or at least of growing prosperity, is going on throughout its territory. The state of traffic by navigation will be seen by reference to our articles CALEDONIAN CANAL, CRINAN CANAL, and those on the various ports; and that of the fisheries, by reference to the articles WICK, ULLAPOOL, TOBERMORY, and STORNOWAY. The annual exportations from the whole of the H. and Western Islands are estimated by the Messrs. Anderson, in their *Guide to the Highlands*, at £1,100,000,—consisting of sheep and wool, £250,000; black cattle, £250,000; herrings, £200,000; grain, £100,000; whisky, £200,000; salmon, kelp, wood, pork, &c., £100,000. Two remunerating productions of a kind not very likely to be generally adverted to, may be particularly specified,—timber and game. H. timber consists principally of pine, or fir, and birch. The former, when raised from planting, is disposed of chiefly in the form of props for coal-mines; and the latter is sold as material for herring-barrels. Between 200 and

300 cargoes of props, logs, and deals are annually shipped from the Moray frith. Game, though not strictly an article of exportation, draws profits to the country as directly as if it were. Highland proprietors now so very generally let the right of sporting on their lands, that moors, varying in their accommodations and resources to suit the different classes of bidders in the market, may be rented at all prices from £50 to £500. Partridges and hares in the low grounds, the ptarmigan and the mountain hare in the lofty uplands, the stately red-deer in the sequestered wolds, the roe in the lower coverts, the heath-fowl as a substitute for the pheasant,—these, and grouse, woodcocks, snipes, wild-ducks, and other game, attract the sportsman, and bring rental to the proprietor.

*Education and Ecclesiastical affairs.*] The H. and Western islands, after the extinction of Culdeism and the full establishment of Popery, were distributed into the 6 dioceses of Dunkeld, Argyle, Moray, Ross, Caithness, and the Isles. On the abolition of Popery in 1560, the first draft of the constitution of the Reformed church, portioned the H. and Islands, including the Orkneys, into the districts of Argyle, Ross, and Orkney, and assigned to them 3 of the 10 superintendents which it provided for the kingdom. But there followed struggles between Presbyterianism and Episcopacy, alternate ascendancies of the two systems, which operated with a most malign influence; and in the earlier years succeeding the Reformation, the paucity of preachers which could be found for the whole kingdom, the obstacle of the Gaelic language, and the poverty, thinness of population, and physical obstructions of the Highlands, prevented many parts of the region from becoming the scene of any pastoral ministrations, or even occasional religious services. So late as 1650, Lochaber, and some other equally important districts, remained untrodden by any Protestant pastor. The people were profoundly ignorant of the art of reading; and, even though the schoolmaster had gone amongst them, they possessed not a single copy of the Scriptures. After the Revolution, in 1688, and the immediately subsequent settlement of the Established church upon its present basis, considerable solicitude was evinced to make more extensive religious and educational provision for the H. Still, in spite of all efforts, the 18th cent. closed without any considerable enlightenment of the pop. having been effected. Since the commencement of the 19th cent., however, the ecclesiastical and educational and literary history of the H. partakes largely of the bright tints of improvement which depict the history of their agriculture and their political condition. According to the report of the General Assembly's committee, in 1833, the H. and Islands, including the Orkneys and the Shetlands—or the synod of Argyle, the presbyteries of Alford and Kincardine O'Neil in the synod of Aberdeen, and the synods of Moray, Ross, Sutherland and Caithness, Glenelg, Orkney and Zetland, comprehending 220 parishes, and a pop. in 1831, of 504,955—contained 273 parochial schools, attended by 14,202 scholars,—315 societies' schools, attended by 18,085 scholars,—137 privately endowed schools, attended by 6,314 scholars,—372 unendowed or voluntary schools, attended by 13,728 scholars,—418 Sabbath schools,—20 week-day evening schools,—and about 80 schools of industry supported by the Society for propagating Christian Knowledge.

**HIGHLANDS**, a range of mountains in the state of New York, U. S., sometimes called Mattoawan, or Fishkill mountains, and forming a branch of the Alleghany chain. They run NE and SW through the counties of Rockland, and across the Hudson

into Orange, Westchester, Putnam, and Dutchess counties, and present a varying breadth of from 15 to 20 m. Their highest summit does not exceed 1,685 ft. above sea-level.

**HIGHLEY**, a parish in Salop,  $6\frac{3}{4}$  m. SSE of Bridgenorth, W of the Severn. Area 1,527 acres. Pop. in 1831, 404; in 1851, 360.

**HIGH-SHOALS**, a village of Walton co. in the state of Georgia, U. S., 70 m. NW of Milledgeville, near a rapid of the same name in Appalachee river.

**HIGHTAE**, a village in Dumfries-shire, in the p. and  $2\frac{1}{2}$  m. S of Lochmaben. It forms one of 4 small contiguous villages, named Four Towns, the united pop. of which is 664 individuals.

**HIGHTOWN**, or **HETON**, a village of Roxburgh-shire, in the p. of Roxburgh, on the turnpike from Berwick to Carlisle, and  $2\frac{1}{2}$  m. from Kelso. Pop. about 300.

**HIGHTSTOWN**, a village of East Windsor township, Mercer co., in the state of New Jersey, U. S., 19 m. E of Trenton, and intersected by the Camden and Amboy railroad, and consisting, in 1840, of about 60 dwellings.

**HIGHWAY**, a parish of Wiltshire,  $4\frac{1}{2}$  m. NE of Calne. Area 813 acres. Pop. in 1851, 122.

**HIGH-WEEK**, a parish of Devonshire,  $1\frac{1}{2}$  m. NW of Abbots-Newton. Area 2,422 acres. Pop. in 1851, 1,398.

**HIGHWORTH**, a market-town and parish in Wilts, 22 m. NE of Chippenham, 40 m. NE of Salisbury, 74 m. NW of London, and  $3\frac{1}{2}$  m. NW of the Shrivensham station of the Great Western railway. Area of p. 10,000 acres. Pop. 4,026. The town is pleasantly situated on an eminence, near the Vale of the White Horse. It is chiefly built of stone. Pop. of tything of H. town, 698.

**HIGUERA (LA)**, or **EL-HIGUER**, a cape of Spain, in the prov. of Guipuzcoa, to the NW of the embouchure of the Bidassoa. It has but little elevation, and forms the W point of the entrance to the port of Fuenterrabia.

**HIGUERA (ISLA DE LA)**, or **ISLA CRISTINA**, a village of Spain, in Andalusia, in the prov. and 18 m. W of Huelva, partido and 12 m. E of Ayamonte, on the Mediterranean, between the embouchures of the Guadiana and Odiel. Pop. 1,819. It has a parish-church and a custom-house, a safe and commodious harbour, and possesses extensive pilchard fisheries. This v. was founded by the Catalans after the great earthquake in Lisbon in 1755.

**HIGUERA-JUNTO-A-ARECENA**, a town of Spain, in Andalusia, in the prov. of Huelva, partido of Arecena, in the Sierra Morena. Pop. 1,195.

**HIGUERA-DE-ARJONA**, a town of Spain, in Andalusia, in the prov. and 19 m. NNW of Jaen, partido of Andujar, on the r. bank of the Salado-de-Arjona, near the confluence of that river with the Guadalquivir. Pop. 704. It has an hospital.

**HIGUERA-DE-BARGAS**, a town of Spain, in New Castile, in the prov. and 28 m. S of Badajoz, partido of Olivenza. Pop. 1,711. It has some manufactories of cloth.

**HIGUERA-DE-LLERENA**, or **LLERENA**, a town of Spain, in New Castile, in the prov. of Badajoz, partido and 11 m. NE of Llerena, on the great road from Badajoz to Madrid. Pop. 81.

**HIGUERA-DE-MARTOS**, a town of Spain, in Andalusia, in the prov. of Jaen, partido of Martos-y-Fuensanta.

**HIGUERA-LA-REAL**, a town of Spain, in New Castile, in the prov. and 41 m. SSE of Badajoz, partido and 2 m. SW of Fregenal-de-la-Sierra, on a hill covered with vines, olive-trees, &c. Pop. 4,992. It has a parish-church, a Jesuits' college, and several convents, and possesses considerable trade.



**HIGUERA-DE-LA-SERENA**, a town of Spain, in New Castle, in the prov. of Badajoz, partido of Castuero. Pop. 1,297.

**HIGUERON**, a river of Central America, in the republic of Costa Rica. It descends from the chain which runs centrally through the republic, flows SW, and throws itself into the Pacific at English-Harbour, after a course of about 60 m.

**HIGUERUELA**, a town of Spain, in the prov. and 26 m. E of Albacete, and partido of Chinchilla, on a declivity of Mount Higos. Pop. 2,372. It has a parish church and an elementary school.

**HIGUEY**, a bay on the SE coast of the island of Hayti, in the dep. of Ozama, in N lat. 18° 20', and W long. 68° 35', to the W of Cape Espado. It receives a small river of the same name, which passes in its course a town also called Higuey. It is 84 m. E of St. Domingo, and has about 500 inhabitants. The river H. has a course of about 30 m.

**HI-HO**, a river of the Corea, in the prov. of Hoang-hai. It has its source in the mountains which extend in a S direction through the interior of the peninsula, runs W, and throws itself into the Yellow sea, in N lat. 38° 45', and at the confluence of the Ping-Yang. It has a course of about 75 m.

**HIJAR**, a judicial partido and town of Spain, in Aragon, in the prov. and 62 m. NNE of Teruel, on the brow of a hill, on the Martin. The partido comprises 12 pueblos. Pop. 3,060.

**HIKLAR**, a town of Turkey in Asia, in Karamania, in the sanjak and 15 m. N of Kaisarieh, and 90 m. SW of Sivas, on the slope of a rocky hill which forms the N extremity of the plain of Kaisarieh, and the summit of which is crowned by an artificial mound, supposed to be the tomb of one of the kings of Cappadocia. The streets are narrow and very steep.

**HILAIRE** (St.), a canton and commune of France, in the dep. of the Charente-Inferieure, arrond. of Saint-Jean-d'Angely. The cant. comprises 12 com. Pop. in 1831, 8,365; in 1841, 8,324. The village is 7 m. S of St.-Jean-d'Angely, near the source of the Bramerit. Pop. 1,321.—Also a canton, commune, and town, in the dep. of the Aude, arrond. of Limoux. The cant. comprises 13 com. Pop. in 1831, 4,671; in 1841, 4,681. The town is 5 m. ENE of Limoux, on the Languette. Pop. 983. It has 2 oil-mills. Fairs for cattle, mercery, linen fabrics, and other commodities, are held twice a-year.—Also a village in the dep. of the Indre, cant. of Belabre. Pop. 1,010. It produces good red wine.—Also a commune in the dep. of the Lot-et-Garonne, cant. of Ogen. Pop. 1,127.—Also a commune in the dep. of the Nord, cant. and 4 m. ENE of Carnieres. Pop. in 1841, 1,905.—Also a hamlet in the dep. of the Seine-Inferieure, cant. and com. of Rouen. Pop. 1,000.—Also a village in the dep. of the Allier, cant. and 8 m. S of Bourbon-l'Archambaud. Pop. 782. Cattle fairs are held here 5 times a-year.—Also a village in the dep. of the Doubs, cant. and 2 m. NNE of Roullans-l'Eglise. Pop. 140. Fairs for cattle and grain are held here 4 times a-year.

**HILAIRE-DU-BOIS** (SAINT), a commune of France, in the dep. of the Loire-Inferieure, cant. of Clisson, 17 m. SE of Nantes. Pop. 1,224.—Also a commune in the dep. of the Maine-et-Loire, cant. and 1½ m. SW of Vihiers, and 26 m. WSW of Saumur. Pop. 1,293.

**HILAIRE-BONNEVAL** (SAINT), a village of France, in the dep. of the Haute-Vienne, cant. and 2 m. NNE of Pierre-Buffière. Pop. 780. In its vicinity are mines of copper, iron, lead, and tin.

**HILAIRE-DE-BRENS** (SAINT), a village of France, in the dep. of the Isere, cant. and 4 m. SSE

of Cremieux. Pop. 265. A fair is held here once a-year for cattle, ironmongery, and agricultural implements.

**HILAIRE-DE-BRIOUZE** (SAINT), a commune of France, in the dep. of the Orne, cant. of Briouze. Pop. 1,090.

**HILAIRE-DE-CHALEONS** (SAINT), a commune of France, in the dep. of the Loire-Inferieure, cant. and 6 m. NE of Bourgneuf-en-Retz. Pop. 800. It has an annual cattle fair.

**HILAIRE-DE-LA-COTE** (SAINT), a commune of France, in the dep. of the Isere, cant. and 4 m. E of La-Côte-Saint-André. Pop. 1,259.

**HILAIRE-SOUS-COURS** (SAINT), a village of France, in the dep. of the Cher, cant. and 2 m. SW of Vierzon, on the l. bank of the Arnon. Pop. 289.

**HILAIRE-LE-DOYEN**, a village of France, in the dep. of the Maine-et-Loire, cant. and 1 m. N of Montreuil-Bellay, and 9 m. SW of Saumur. An important fair is held here once a-year for cattle, pigs, grain, wine, casks, ironmongery, and mercery.

**HILAIRE-CUSSON-LA-VALMITTE** (SAINT), a commune of France, in the dep. of the Loire, cant. and 4 m. S of Saint-Bonnet-le-Château. Pop. 1,014. It has an annual fair.

**HILAIRE-DE-DURFORT** (SAINT). See DUFORT.

**HILAIRE-D'ESTISSAC** (SAINT), a village of France, in the dep. of the Dordogne, cant. and 8 m. ESE of Villembard. Pop. 400. It has several iron-works.

**HILAIRE-FROISSAC** (SAINT), a commune of France, in the dep. of the Corrèze, cant. of Lapleau. Pop. 1,145.

**HILAIRE-DU-HARCOURT** (SAINT), a canton, commune, and town of France, in the dep. of the Manche, arrond. of Mortain. The cant. comprises 12 com. Pop. in 1831, 14,389; in 1841, 14,568. The town is 9 m. SW of Mortain, and 39 m. S of Saint-Lô. Pop. in 1841, 2,994. It has a communal college, and possesses numerous tanneries, several wax-works, a wool-spinning-mill, and manufactories of woollen and linen fabrics. It has 5 annual fairs, and carries on an active trade in grain, horses, cattle, wax, honey, sheep's leather, linen thread, and jewellery.

**HILAIRE-DES-LANDES** (SAINT), a commune of France, in the dep. of the Ille-et-Vilaine, cant. and 5 m. S of St. Brice-en-Cogles. Pop. 1,789. It has several tanneries.—Also a commune in the dep. of the Mayenne, cant. of Chailland. Pop. 1,775.

**HILAIRE-EN-LIGNIERES** (SAINT), a village of France, in the dep. of the Cher, cant. and 2 m. S of Lignières, on the l. bank of the Arnon. Pop. 1,838. Ochre of excellent quality is found in the environs.

**HILAIRE-DES-LOGES** (SAINT), a commune of France, in the dep. of the Vendee, arrond. of Fontenay-le-Comte. The cant. comprises 10 com. Pop. in 1831, 10,478; in 1841, 10,914. The village, called also Hilaire-sur-l'Austise, is 8 m. E of Fontenay-le-Comte. Pop. 3,570. It has an annual cattle fair.

**HILAIRE-DE-LOULAY** (SAINT), a commune of France, in the dep. of the Vendee, cant. and 2 m. N of Montaigu, and 24 m. NNE of Bourbon-Vendee. Pop. 1,845.

**HILAIRE-DES-MONTS** (SAINT), a village of France, in the dep. of the Vienne, cant. and 5 m. SE of Châtellerault, and 21 m. NE of Poitiers. Pop. 1,300.

**HILAIRE-LES-MORTAGNE** (SAINT), a village of France, in the dep. of the Vendee, cant. and 2 m. SE of Mortagne-Sur-Sèvre, near the r. bank of the Sevre-Nantaise. Pop. 629. It has a paper-mill.

**HILAIRE-LA-PALLU** (SAINT), a commune of France, in the dep. of the Deux-Sevres, cant. of Mauzé, 14 m. WSW of Niort. Pop. 1,645. A cattle fair is held here monthly.

**HILAIRE PEYROUX** (SAINT), a commune of France, in the dep. of the Corrèze, cant. and 8 m. NW of Tulle. Pop. 1,619. Fairs for cattle and pigs are held here 6 times a-year.

**HILAIRE-DE-RIEZ** (SAINT), a commune of France, in the dep. of the Vendée, cant. and 2 m. N of Saint-Gilles-sur-Vie, and 20 m. NNW of Les Sables. \*Pop. 2,560. Cattle fairs are held here 3 times a-year.

**HILAIRE-DU-ROSIER** (SAINT), a commune of France, in the dep. of the Isère, cant. of Saint-Marcellin. Pop. 1,015.

**HILAIRE-SAINT-MESNIM** (SAINT), a commune of France, in the dep. of the Loiret, cant. and 5 m. SW of Orleans, on the l. bank of the Loire. Pop. 1,282. It has a paper-mill.

**HILAIRE-DE-LA-SONE** (SAINT), a village of France, in the dep. of the Isère, cant. and 5 m. SW of St. Marcellin, and 26 m. WSW of Grenoble. Pop. 765. Cattle fairs are held here 3 times a-year.

**HILAIRE-DE-TALMONT** (SAINT), a commune of France, in the dep. of the Vendée, cant. and  $\frac{3}{4}$  m. E of Talmont, and 10 m. ESE of Sables-d'Olonne. Pop. 2,420. In the vicinity is a mine of sulphurated argentiferous lead.

**HILAIRE-LA-TREILLE** (SAINT), a commune of France, in the dep. of the Haute-Vienne, cant. of Magnac-Laval. Pop. 1,098.

**HILAIRE-DE-VOUHIS** (SAINT), a commune of France, in the dep. of the Vendée, cant. of Chantonay. Pop. 1,040.

**HILARY** (SAINT), a parish in Glamorganshire, 2 m. SE of Cowbridge. Pop. 157. See also **HELIER** (SAINT) and **HILLARY** (SAINT).

**HILCHENBACH**, a town of Prussia, in the prov. of Westphalia, regency and 30 m. S of Arnsberg, circle and 9 m. NNE of Siegen. Pop. 1,279. It has manufactories of woollen and linen fabrics, of tobacco, leather, and steel-ware, and several powder-mills.

**HILCOT**, a tything in the p. of North Newton, Wilts.

**HILDBURGHAUSEN** (SAXE), a duchy in the interior of Germany, bounded by Saxe-Meiningen and Saxe-Coburg, and now united to Saxe-Meiningen. It contains a territorial extent of 217 sq. m. The soil is in general of little fertility, particularly in the N, where the surface is covered with part of the forest of Thuringia. The chief wealth of the country consists in its woods and pasture. Wool-lens, linen, thread, glass, dye-stuffs, salt, and vitriol, are exported in small quantities. The duke of Saxe-Hildburghausen held the fourth rank among the princes of the house of Saxe, and had a share of a vote in the smaller Germanic diet, and a full vote in the larger. This miniature principality had a military force of little more than 100 men; and a revenue of £20,000, materially encumbered, after the fashion of greater empires, by the interest of debt. The administration was also divided, with true German minuteness, into the departments of justice, finance, education, police, public works, and the army.

**HILDBURGHAUSEN**, a town of Saxe-Meiningen, the cap. of the duchy of the same name, situated on the r. bank of the Werra, 17 m. SE of Meiningen. Pop. 4,181. It has a gymnasium, an orphan asylum, and a seminary for schoolmasters. Its manufactures are woollen cloth and *papier-maché*.

**HILA'L** (RAS EL). See **HAL-AL**.

**HILDEN**, a village of Prussian Westphalia, in

the duchy of Berg. Pop. 975. It has manufactures of cloth, and cotton spinning mills.

**HILDERSHAM**, a parish in the co. of Cambridge, 2 m. NNW of Linton, on the Cam. Area 1,499 acres. Pop. in 1831, 214; in 1851, 248.

**HILDERSTONE**, a township in the p. and 3 m. ENE of Stone, Staffordshire.

**HILDERTHORPE** with **WILSTHORPE**, a township in the p. and  $1\frac{1}{2}$  m. S of Bridlington, E. R. of Yorkshire. Area 712 acres. Pop. in 1851, 147.

**HILDESHEIM**, a considerable province in the S of Hanover, lying between  $51^{\circ} 44'$  and  $52^{\circ} 25'$  N lat., adjacent to the prov. of Göttingen. The superficial extent of the whole is estimated at 660 sq. m., and the pop. at 162,000. The surface is uneven throughout, particularly in the S, where it is intersected by ramifications of the Harz. It is watered by the Innerste, the Oker, the Ecker, and the Fuse. Corn, fruit, flax, hops, cattle, and wool, are objects of export. H. was long an independent ecclesiastical state, the bishopric having been founded by Charlemagne in 822, and its territory having received large additions from time to time. It was noted for a succession of warlike bishops, one of whom having undertaken a contest, in 1519, with the dukes of Brunswick and Hanover, these princes procured a ban of the empire against him, and took possession of the greater part of his states, which they did not restore till 1643. The treaty of Westphalia preserved the bishopric, placing it under the protection of Hanover; and this arrangement continued till 1802, when the territory of H. was included among other secularizations, and given to the king of Prussia. After 1807, it formed a part of the kingdom of Westphalia; and in 1815 it was added by the congress of Vienna to the kingdom of Hanover. It is governed as an independent province, and has its own states. It is divided into 15 bailiwicks; and still has a bishop, but without temporal authority.

**HILDESHEIM**, the chief town of the above principality, situated 18 m. SE of Hanover. Pop. in 1845, 14,734. It is old and irregularly built, and presents numerous quaint old houses, with gables to the street, and many of them very lofty, consisting of several stories, each swelling out above the one beneath it. It was formerly fortified; but its walls have been demolished; and converted into public walks. It stands on a declivity near the small river Innerste, which, dividing into two branches, here forms an island covered with gardens. The town is divided into an old and new quarter, which have each their own magistrates, but in affairs affecting the general interest, hold meetings in common. The council and the majority of the citizens are Lutherans; the bishop and a part of the inhabitants are Catholics. The cathedral is a large, "severe, old" Gothic building, containing many antiquities, but it has been disfigured by recent repairs. The Catholics have 10 other churches, the Lutherans 8. The other public buildings are the episcopal palace, the council-house, the arsenal, the public stables, and the mint. The chief employment of the inhabitants is brewing and the manufacturing of yarn and coarse linen. A branch railway runs from this town to the Hanover and Brunswick railway, which it joins at Lehrte, 10 m. E of Hanover.

**HILELA**, or **HILET**, a town of Morocco, in the prov. of Taflet, in the upper part of the valley of the Ziz or of Taflet.

**HILFIELD**, a parochial chapelry in Dorset, within the p. of Sydling-St. Nicholas, 9 m. S of Sherbourn. Area 1,584 acres. Pop. in 1851, 124.

**HILGAY**, a parish in Norfolk,  $3\frac{1}{2}$  m. SSE of Market-Downham, on the Wensay. Area 7,860 acres. Pop. in 1831, 1,176; in 1851, 1,770.

**HILGERSDORF**, a village of Bohemia, in the circle and 39 m. NNE of Leitmeritz, consisting of about 150 houses.

**HILL**, a parish in Gloucestershire, 4 m. SSW of Berkeley, on the Severn. Area 2,476 acres. Pop. in 1831, 257; in 1851, 216.—Also a township in the p. of Hales-Owen, Salop. Pop. in 1851, 1,122.—Also a hamlet in the p. of Leamington-Hastings, Warwickshire.

**HILL**, a township of Grafton co., in the state of New Hampshire, U. S., 24 m. NNW of Concord, watered by Pemigewasset and Smith's rivers. The surface, especially towards the S, is hilly, but the soil possesses considerable fertility. The village consists of a long street, on the Pemigewasset, opposite Sandbornton, with which it is connected by a bridge. Pop. in 1840, 999.

**HILL-DEVERILL**, a parish in Wilts,  $3\frac{1}{2}$  m. S of Warminster, on the Willey. Area 1,420 acres. Pop. in 1831, 129; in 1851, 122.

**HILL-END**, a hamlet in the p. of Leigh, Worcestershire.

**HILL-FARRANCE**, a parish in Somerset,  $3\frac{3}{4}$  m. W of Taunton, on a branch of the Tone, and on the line of the Bristol and Exeter railway. Area 920 acres. Pop. in 1851, 616.

**HILL-GORE**, a township of Washington co., in the state of Maine, U. S. Pop. in 1840, 30.

**HILL-MARTON**, or **HILLMARTON**, a parish in Wilts,  $3\frac{1}{4}$  m. NNE of Calne. Area 4,182 acres. Pop. in 1831, 651; in 1851, 828.

**HILL-AND-MOOR**, a township in the p. of Fladbury, Worcestershire, 3 m. NNE of Pershore, N of the Avon. Area 1,940 acres. Pop. in 1831, 304; in 1851, 372.

**HILL-MORTON**, or **HILLMORTON**, a parish in Warwickshire,  $2\frac{1}{2}$  m. SE of Rugby, on a branch of the Avon, and intersected by the Birmingham and London railway, and the Oxford canal. Area 3,150 acres. Pop. in 1831, 873; in 1851, 1,049.

**HILL-RIVER**, a river of British North America, which has its source to the NE of Lake Winnipeg; runs first E through Winnipagosses lake; thence bends NNE, traverses Holy and Knee swampy lakes; and throws itself into Hudson's bay, at York, to the ESE of Port-Nelson, after a course, in a generally NE direction, of 300 m.

**HILLAH**, or **HELLAH**, a town of Asiatic Turkey, in the pash. and 60 m. S of Bagdad, on the W bank of the Euphrates, and on the borders of the great Syrian desert, in N lat.  $32^{\circ} 28\frac{1}{2}'$ , E long.  $44^{\circ} 28'$ , 91 m. by water, or  $61\frac{1}{2}$  m. direct S,  $33^{\circ}$  E of Felujah. It contains about 10,000 inhabitants. The town is well-built, has an extensive and well-regulated bazaar, several stately caravanserais, chiefly built of materials obtained from ruins in the vicinity, and a number of coffee-houses along the banks of the river. It is governed by a hakim, under the pasha of Bagdad. A quarter of the town, situated on the E bank of the river, is connected with the other by a bridge of boats, but is not nearly so considerable as the W quarter. The soil in the vicinity is fertile, but almost quite neglected. The Euphrates widens considerably as it approaches H., where it is about 200 yds. wide, and in spring about 40 ft. deep. Its ordinary depth here is 15 ft., with a current of  $2\frac{1}{2}$  knots per hour. A floating-bridge, with a moveable boat in its centre, 450 ft. in length, here crosses the river. A tolerably active commerce is carried on here by means of sharp well-built latine vessels of from 50 to 80 tons, and drawing from 5 to 9 ft. water. Some of the smaller of these vessels make their way as far up the river as to Hit and Anna, which they supply with rice, dates, oil, cloth, and Indian goods. The distance along the Euphrates

from Anna to H. is 440 m.; from H. to Kornah, 348 m.; to Bassora, 390 m.—The modern features of H. possess very little interest, compared to that derived from the circumstance, that upon it, and a district immediately to the N, appear to be situated the remains of the ancient and renowned capital of the eastern world. See article **BABYLON**.

**HILLAM**, a township in the p. of Monk-Fryston, W. R. of Yorkshire, on the York and Derby railway, 4 m. N of Ferrybridge. Area 1,660 acres. Pop. in 1831, 291; in 1851, 340.

**HILLARE**, a commune of Belgium, in the prov. of E. Flanders, dep. of Lokeren. Pop. 486.

**HILLARTSHAUSEN**, a village of Electoral Hesse, in the prov. of Lower-Hesse, circle of Cassel, on the l. bank of the Weser, 10 m. E of Immenhausen, and 2 m. NNW of Munden. Pop. 102. In the vicinity of this village is an extensive glass-work.

**HILLARY (SAINT)**, a parish in Cornwall, 5 m. E by N of Penzance. It includes the town of Marazion. Area 3,657 acres. Houses 609. Pop. in 1801, 1,999; in 1831, 3,121; in 1851, 3,021. Among the examples of brecciated lodes, observed during the Ordnance geological survey, were noticed, in this district, fragments of slate cemented by oxide of tin and yellow copper-ore, at Wheal-Fortune, near Marazion, and angular portions of slate joined by oxide of tin at Perranuthno downs, near St. H. Between the sea in Mounts bay, and the tidal water in the Heyl river, the land is of very moderate height, probably not above 100 ft. At Wheal-Fortune, according to the approximate heights obtained during the survey, it is only 90 ft. Even at St. H., on the high ground separating the Heyl river, near Tregermer, from the sea in Mounts bay, the elevation was found to be only 190 ft.: the Marazion mines 148 ft., and Penberthy cross, near St. H., also 148 ft. The Heyl and its tributary-stream, from Germoe, nearly cut this part, with the Land's-end high land, across from the Bristol to the English channels. In the year 1800, there were 4 copper-mines in St. H., but none of them were amongst the most productive in Cornwall. The quantity of copper-ores from the Marazion mines, sold at the Cornish ticketings, during the year ending 30th June, 1838, was 1,659 tons, value £9,729 9s.; from the Great Wheal-Fortune, &c., mines, 3,143 tons, value £19,079 2s. The quantity of black tin sold by ticketing, in 1837, from the Marazion mines, was 102 $\frac{1}{2}$  tons, value £4,575 8s. 9d.; from East Wheal-Fortune,  $3\frac{1}{2}$  tons.

**HILLAYA**, or **HILAYA**, a village of Sinde, on the W bank of the Oxus, 32 m. S of Kotri, near the Kinjor lake.

**HILLBECK**, a township in the p. of Brough, Westmoreland,  $\frac{1}{2}$  m. NNE of Bough. Pop. in 1851, 94.

**HILLBOROUGH**, or **HILLBURGH**, a parish and village in Norfolk, 6 m. S of Swaffham, on a branch of the Wessey. Area 3,101 acres. Pop. in 1851, 366.

**HILLE**, a village of Prussia, in the prov. of Westphalia, regency and 8 m. NW of Minden. Pop. 2,486.—Also a village of Sweden, in the laen and 4 m. NE of Gefle.

**HILLEBRUGS-EYNDE**, a commune of Belgium, in the prov. of Antwerp, dep. of Bevel. Pop. 133.

**HELLEGEM**, a department and commune of Belgium, in the prov. of East Flanders, arrond. of Audenard. Pop. 1,135.

**HILLEGOM**, a village of Holland, in the prov. of Holland, arrond. and 11 m. NNE of Leyden, cant. and 8 m. NE of Noordwyk, pleasantly situated on the W side of the lake of Haarlem, and near the Haarlem and Leyden canal. Pop. 1,538. Legumes and fruit are extensively cultivated in the environs.

**HELLEROD**, a town of Denmark, in the island and diocese of Sieland, bail. of Frederiksborg, 21 m



NNW of Copenhagen, on a little lake. Pop. in 1840, 1,800. It possesses a church, a grammar-school, and two hospitals. It has several distilleries, and extensive tanneries. In the vicinity is the fine royal castle of Frederiksborg, built by Christian IV., in the chapel of which the crown of Denmark is kept.

**HILLESDEN**, a parish in Buckinghamshire,  $3\frac{1}{2}$  m. SSW of Buckingham. Area 2,150 acres. Pop. in 1831, 251; in 1851, 244.

**HILLESGONDSBERG**, a village of Holland, in the prov. of Holland, arrond. and 2 m. N of Rotterdam. Pop. 1,991.

**HILLESHEIM**, a town of Prussia, in the prov. of the Rhine, regency and 39 m. N of Treves, circle and 11 m. NW of Daun, at the foot of the Eifel mountains. Pop. 700. In the vicinity is an extensive iron-mine.

**HILLESTED**, a parish of Denmark, in the island of Laaland, 2 m. SW of Marieboe. Pop. 500.

**HILLIAR**, a township of Knox co., in the state of Ohio. Pop. in 1840, 1,012. It contains the village of Centreburg.

**HILLIER**, a township of Upper Canada, in Prince Edward district, comprising an area of 30,717 acres, of which 16,460 are under cultivation, bounded on the S and W by Lake Ontario, and watered by several creeks which flow into the bays by which the W side of the township is indented.

**HILLIER**, or **HELLIER (POINT)**, a headland of SW. Australia, on the S side of the peninsula which forms the E. side of William bay, in S lat.  $35^{\circ} 4'$ , E long.  $117^{\circ} 9'$ .

**HILLIERE (LA)**, a village of France, in the dep. of the Gers, cant. and 3 m. ESE of Samatan, 4 m. E of Lombez. Pop. 987.

**HILLINGDON**, a parish in Middlesex, 1 m. SE of Uxbridge, intersected by the Great Western railway and the Grand Junction canal. Area 4,720 acres. Pop. in 1831, 6,885; in 1851, 9,558.

**HILLINGTON**, a parish in Norfolk,  $6\frac{3}{4}$  m. SE of Norwich, on the Yare. Area 516 acres. Pop. in 1831, 52; in 1851, 87.—Also a parish  $3\frac{3}{4}$  m. E of Castle-Rising. Area 2,529 acres. Pop. in 1851, 346.

**HILLION**, a commune of France, in the dep. of the Côtes-du-Nord, cant. and 4 m. E of Saint-Brieux. Pop. 2,518.

**HILLOCK POINT**, a headland of NE. Australia, on the E side of a small island, separated from the continent by a narrow channel, and to the N of Halifax bay, in S lat.  $18^{\circ} 50'$ , E long.  $146^{\circ} 40'$ .

**HILL'S POINT**, a headland of the state of Maryland, U. S., in the co. of Dorchester, on the E side of Chesapeake bay, between the embouchures of the Choptank and Hudson, in N lat.  $38^{\circ} 35'$ .

**HILLSBORO'**, a village of Jefferson co., in the state of Missouri, U. S., 132 m. E of Jefferson city, on the E side of Big river.—Also a river in St. John co., Florida, which has its source to the SW of Lake George; runs SW; and falls into the bay of Espiritu-Santo, in the gulf of Mexico, after a course of about 78 m.

**HILLSBOROUGH**, a parish and market-town in co. Down,  $3$  m. SSW of Lisburn. Pop. of p. 5,877; of town, 1,300.

**HILLSBOROUGH**, the capital of the island of Carriacou, one of the Grenadines. It stands on the SW side of the island, and has a good port. The adjacent district is covered with cotton plantations.

**HILLSBOROUGH**, a county of the state of New Hampshire, U. S., comprising an area generally hilly of 1,245 sq. m., watered by Merrimac, Contoocook, Nashua, Souhegan, and Piscataquoag rivers. The soil possesses various degrees of fertility. Pop. in 1840, 42,494. Its cap. is Amherst.—Also a county of Florida, bounded on the W by the gulf of Mexico,

and including Tampa bay. It is watered by Hillsboro', Alafia, and Asternal rivers, and possesses considerable diversity of soil. Pop. 452. Its cap. is Tampa.—Also a township of the co. of the same name, in New Hampshire, 24 m. WSW of Concord. It has a hilly surface, watered by Contoocook and Hillsborough rivers, and possesses considerable fertility of soil. Pop. 1,807.—Also a township of Somerset co., in the state of New Jersey, bordered on the N by Raritan river, on the E by Millstone river, and watered by Roy's brook. It is partly hilly, and its soil is partly clay loam and red shale. Pop. 2,863.

—Also a village of Bethlehem township, Washington co., in the state of Pennsylvania, 203 m. W of Harrisburg, at an alt. of 1,002 ft. above the level of the Ohio at Wheeling. It consists of a single street, and contained in 1840 about 180 inhabitants.—Also a village of Caroline co., in the state of Maryland, 59 m. E of Annapolis, on Tuckahoe creek.—Also a village of London co., in the state of Virginia, 166 m. N of Richmond. Pop. 175.—Also a village of Orange co., in the state of North Carolina, 40 m. NW of Raleigh, on Eno river, a branch of Neuse river.—Also a village of Jasper co., in the state of Georgia, 28 m. NW of Milledgeville. Pop. about 75.

—Also a village of Scott co., in the state of Mississippi, 48 m. E of Jackson, on a small branch of Pearl river.—Also a village of Fleming co., in the state of Kentucky, 91 m. E of Frankfort. Pop. 200.—Also a town of Highland co., in the state of Ohio, 75 m. SW of Columbus, near the source of Rocky fork of Paint creek. Pop. 1,200.—Also a village of Montgomery co., in the state of Illinois, 64 m. S of Springfield. Pop. 400.—Also a parish of New Brunswick, on the W and S side of the Peticoctie river.

**HILLSBOROUGH (BAY)**, an extensive indentation of the S coast of Prince Edward's island, in the gulf of St. Lawrence. The depth and greatest breadth of its embrasure are about 15 m. Three rivers—one of the same name, the Gork, and the Elliot—flow into this bay at Charlotte's town. Of these the H. is the largest, being navigable for large ships 7 or 8 m.—Also a bay on the coast of Kerguelen island.

**HILLSBOROUGH (CAPE)**, a headland of New South Wales, to the SE of Repulse bay, in S lat.  $20^{\circ} 53' 40''$ , E long.  $149^{\circ} 0' 15''$ .

**HILLSBOROUGH (ISLAND)**, an island of the Atlantic, near the E coast of Labrador, to the N of Nain, in N lat.  $57^{\circ} 15'$ , W long.  $61^{\circ} 40'$ .

**HILLSDALE**, a county of the state of Michigan, U. S., comprising a surface generally hilly of 576 sq. m., drained by St. Joseph of Lake Michigan, St. Joseph of the Maumee river, Little Saint Joseph, Goose and Tiffin's creeks, Hog and Sandy rivers, and the S branch of Kalamazoo river. The soil is a rich, black, sandy loam; and iron ore is found here in considerable quantities. Pop. in 1840, 7,240. Its cap. is Jonesville.—Also a township of Columbia co., in the state of New York, 45 m. S of Albany. It is intersected by ranges of hills, including Tagh-kannic mountain, and is drained by Ancram and Copake creeks. The soil consists of gravelly loam and clay. Pop. 2,470.—Also a village of Fayette township, Hillside co., in the state of Michigan, 98 m. WSW of Detroit, on the outlet of St. Joseph or Baubese lake, near the entrance of French creek.

**HILLSIDE AND STAPELY**, a tything in the p. of Odiham, county of Southampton.

**HILLTOP**, a township in the p. of Wragby, W. R. of Yorkshire,  $4\frac{1}{2}$  m. NNW of Sheffield, S of the river Lochy. Pop. in 1831, 86; in 1851, 80.

**HILLTOWN**, a township of Bucks co., in the state of Pennsylvania, U. S., 100 m. E of Harrisburg, drained by branches of Nishaming creek. Pop. in 1840, 1,910.

HILLO. See ILO.

**HILONGOS**, a town of the island of Leyte, one of the Philippine islands, on the W coast. To the N of the town is a cape of the same name, in N lat.  $10^{\circ} 22'$ , E long.  $124^{\circ} 40'$ .

**HILPERTON**, or **HILPRINGTON**, a parish in Wilts,  $1\frac{1}{2}$  m. NNE of Trowbridge, intersected by the Kennet and Avon canal. Area 1,078 acres. Pop. 996.

**HILPOLSTEIN**, or **HILLPOLDSTEIN**, a langericht-bezirk, or presidial, and town of Bavaria, in the circle of Upper Pfalz, 22 m. S of Nuremberg, and 32 m. ESE of Anspach, on a small river. Pop. 1,495. It has a town-house, remarkable for its antiquity, and a castle. Pop. of presidial, 12,010.—Also a town in the circle of Upper Franconia, 4 m. ENE of Grafenberg, and 23 m. SSW of Baireuth, on a rising ground. Pop. 400.—Also a town in the circle of Middle Franconia, SE of Schwabach. Pop. 1,200.

**HILSAH**, a town of Hindostan, in the prov. and 18 m. NW of Bahar.

**HILSBACH**, a town of Baden, in the circle of the Middle Rhine, cant. of Sinsheim, 21 m. SSE of Heidelberg, on a small stream of the same name, at an alt. of 900 ft. above sea-level. Pop. 1,366, of whom 527 are Catholics. It has a Lutheran and a Reformed church. Fairs are held here 3 times a-year.

**HILSBORO**, or **REGGALA (PORT)**, a bay of the W coast of Morocco, in the district of Suse, to the NE of Cape Non, at the mouth of a small stream which flows into the Atlantic, in N lat.  $29^{\circ} 10'$ .

**HILSEA**, a hamlet in the p. of Wymering, island of Portsea, co. of Southampton, 3 m. NNE of Portsmouth.

**HILSENHEIM**, or **HILTZEN**, a commune of France, in the dep. of the Bas-Rhin, cant. of Marckolsheim, 7 m. NE of Schelestat. Pop. in 1841, 1,747. Sugar from beet-root is extensively manufactured here.

**HILSTON**, a parish in the E. R. of Yorkshire, 13 m. ENE of Kingston-upon-Hull. Area 548 acres. Pop. in 1831, 43; in 1851, 50.

**HILTENFINGEN**, a village of Bavaria, in the circle of Suabia, 17 m. SSW of Augsburg. Pop. 689.

**HILTERFINGEN**, a village of Switzerland, in the cant. of Berne, on the Thuner-see. Pop. 350.—Also a v. of Bavaria, in Suabia, NE of Turkheim. Pop. 760.

**HILTERS**, or **HILDERS**, a town of Bavaria, in the circle of Upper Franconia, 66 m. NE of Bischofsheim. Pop. 1,070. It has a castle.

**HILTON**, a township in the p. of Marston-upon-Dove, Derbyshire, on a branch of the Dove. Pop. in 1831, 651; in 1851, 757.—Also a parish in Dorset,  $7\frac{1}{2}$  m. WSW of Blandford-Forum. Area 2,974 acres. Pop. in 1831, 685; in 1851, 761.—Also a township in the p. of Staindrop, co. of Durham,  $5\frac{1}{2}$  m. SSW of Bishop-Auckland. Area 1,092 acres. Pop. in 1831, 118; in 1851, 101.—Also a parish in Huntingdonshire,  $3\frac{1}{4}$  m. SSW of St. Ives. Area 1,280 acres. Pop. in 1831, 329; in 1851, 384.—Also a township in the p. of Wolverhampton, Staffordshire, W of Bilston. Pop. in 1831, 45; in 1851, 54.—Also a parish in the N. R. of Yorkshire, 3 m. ESE of Yarm, on the Tees. Area 1,340 acres. Pop. in 1831, 113; in 1851, 110.—Also a township in the p. of Appleby-St.-Michael, or Bongate p., Westmoreland. Pop. 271.—Also an ancient parish of Berwickshire, now conjoined with that of Whitsome.

**HILTON**, or **HYLTON**, a township in the p. of Monkwearmouth, co. of Durham,  $3\frac{1}{4}$  m. NW of Sunderland, on the Wear. Area 2,670 acres. Pop. in 1831, 420; in 1851, 546. It contains the hamlet of Wilton, and the village of Wilton-Ferry.

**HILTON**, or **HULTON**, three adjacent towns' tips, distinguished from each other by the names of Over,

Middle, and Little Hilton, in the p. of Dean, co. of Lancaster. They extend from Walkden-moor on the E, to West Houghton on the W, 4 m. SW of Bolton-le-Moors, and 10 m. NW of Manchester. 4 m. SSW of Bolton-le-Moors is the v. of Hilton-lane-ends. Little or Peel H. is  $5\frac{1}{2}$  m. NE of Leigh. Area 1,470 acres. Pop. in 1831, 2,981; in 1851, 3,184. Middle H. is 8 m. E of Wigan, and is W of Little H. Area 1,280 acres. Pop. in 1831, 934; in 1851, 888. Over H. is 3 m. WNW of Little H. Area 1,300 acres. Pop. in 1831, 538; in 1851, 452.

**HILTON-HEAD**, or **TRENCH'S ISLAND**, an island near the shore of the state of S. Carolina, U. S., to the S of the entrance of Port Royal, and NE of the embouchure of the Savannah. It is separated from the continent by a channel 5 m. in length, and about 1 m. in breadth. At its NE extremity is a cape of the same name, in N lat.  $32^{\circ} 12'$ , W long.  $90^{\circ}$ .

**HILTOWN**, a village in the p. of Fearn, Ross-shire, on the Moray frith. Pop. 310.

**HILVARENBEEK**, a town of Holland, capital of a district in the prov. of N. Brabant, arrond. and 17 m. WNW of Eindhoven, and 17 m. SSW of Bois-le-Duc. Pop. 2,500.

**HILVERSUM**, a village of Holland, in the prov. of N. Holland, arrond. and 17 m. SE of Amsterdam, and 5 m. S of Naarden. Pop. 3,500. Woollen fabrics and carpets are extensively manufactured here.

**HILZINGEN**, a village of Baden, in the circle of the See, amt and 6 m. SE of Blumenfeld, and 11 m. NNE of Schaffhausen. Pop. (Cath.) 1,009. It has a castle.

**HIMALAYA MOUNTAINS**, a magnificent barrier running along the N frontiers of Hindostan, and separating it throughout its whole extent from Tibet and Chinese Tartary; and having on the S the plains of Northern India whose greatest elevation above sea-level does not exceed 1,200 ft.; and on the N the elevated table-land of Tibet. It is the *Imaus* of the ancients,—that appellation being the Greek form of the Sanscrit noun *hima*, signifying 'snow,' 'cold,' or 'frost.' From the term *hima* arise the various appellations given to this chain, of *Himadri*, *Himachull*, *Himachull*, *Himavati*, *Himavati*, *Himalleh*, and *Himalaya*, which last is the most general name, and signifies 'the abode of snow.' To the W of Cashmere, the Persian appellation *Hindu-kush*, or 'the Indian mountain,' is substituted for that of Himalaya. Commencing to the W of the Dihong branch of the Brahmaputra, at the snowy chain of the Lang-tang, which runs off from the main range in  $97^{\circ} 25'$  E long.,  $28^{\circ}$  N lat., it runs W and WNW till it meets the Cashmerian range, in N lat.  $34^{\circ}$ , E long.  $76^{\circ}$ . Thence it turns N to  $36^{\circ}$  N lat., whence taking a W direction it runs to the NW frontier of Cabul, in  $35^{\circ}$  N lat.,  $67^{\circ}$  E long., where it joins the Gaurian mountains, or Paropamisan range, NW of Bamian. Between these extreme points, comprehending  $30^{\circ}$  of long. and  $8^{\circ}$  of lat., the H. cannot be less than 1,800 geog. m. in extent. It has, however, become an opinion well-supported by able observers, that the H. is not a distinct mountain-chain apart from the general mass of the great table-land of Tibet, but just the S edge of that vastly elevated plateau. The appearance of this remarkable barrier, as far as it borders Hindostan, especially between the sources of the Gogra and Gunduck, or from the meridians of  $81^{\circ}$  to  $83^{\circ}$ , is so imposingly grand as to induce the belief of ocular deception in those who have witnessed its glories. Hardwicke, Elphinstone, Raper, Webb, Fraser, Hodgson, Strachey, Herbert, Hooker, and others, who have visited this elevated region, seem to have been utterly lost in astonishment when it was first disclosed to their view. The magnificence and variety

of its lofty summits, their sharp and pointed peaks soaring sublime from broad but lofty bases,—the dazzling brightness of their snowy mantle when illumined by the rays of an almost tropical sun,—and the awful and undisturbed repose which reigns amidst their eternal solitudes,—fill the mind with admiration and astonishment which no language can express. "During the day, the stupendous size of the mountains, their interminable extent, the variety and sharpness of their forms, and, above all, the tender clearness of their distant outline melting into the pale blue sky, contrasted with the deep azure above, is described as a scene of wild and wonderful beauty. At midnight, when myriads of stars sparkle in the black sky, and the pure blue of the mountains looks deeper still below the pale white gleam of the earth and snowlight, the effect is of unparalleled solemnity, and no language can describe the splendour of the sunbeams at daybreak streaming between the high peaks, and throwing their gigantic shadows on the mountains below." [Mrs. Somerville's *Physical Geography*.] But this unparalleled scene is best observed in the clear soft light which prevails between dawn and sun-rise,—misty exhalations hiding it during the heat of the day. The sun gilds the pinnacles of the snowy mountains long before it is visible to the inhabitants of the plain, and lights them up again at the close of the day, while darkness already pervades all the lower regions.

*Elevation.*] *Imaus* and *Emodus* were well known to the ancients as ranges clothed in perpetual snow, but they had not, of course, any accurate idea of their real height. Even the Hindus were equally ignorant on this point; and, as to the moderns, though the combined testimony of several travellers, as Andrada, Grueber, Dorville, Bernier, Freyre, Desideri, and Cassiano, had established the fact of their great elevation,—though Rennel had stated that they rose considerably above the horizon, when viewed from the plains, at the distance of 150 m.,—though the illustrious Jones had declared that Chumulari was distinctly visible at a distance of 244 m.,—and finally, though Bogle and Turner, in crossing the H. from Bengal to Lassa and Tishulumbu, had borne witness to the fact by their own experience,—yet all these testimonies long passed almost unheeded. Philosophers and their followers, reposing in perfect security on the theories of Bouguer, Kirwan, and Leslie,—which, built on a few partial facts, pretended to fix with mathematical accuracy limits of congelation for every latitude of the globe,—believed that no mountains could equal, much less excel, the Andes; and Mont Blanc in Savoy, though inferior to Chimborazo by nearly 6,000 ft., was unceasingly proclaimed as the loftiest summit in the old continent. The height of the H. had not indeed been hitherto ascertained by actual measurement; and therefore it was believed that though it might perhaps equal the Alps, it probably did not surpass them. Col. Crawford was the first to throw doubts on these opinions, by the actual measurement of several peaks in the vicinity of Nepal, and he was followed by Colebrook and Webb. The task of defence was undertaken by one theorist in the *Quarterly Review*, whilst Professor Leslie boldly declared his utter disbelief in the measurements of Webb, and affirmed that though the peaks of the H. might perhaps rise to an elevation of 17,000 ft., they could not exceed it. The chief objections were founded on the want of barometrical measurements,—the too great distances of the measuring stations,—the uncertainty of terrestrial refraction,—and above all, the inconsistency of such altitudes with the received doctrine of isothermal lines, and the believed limits of inferior congelation, which latter were stated as curves gradually diminishing in height

IV.

from the equator to the poles all over the globe. But all these objections were answered and confuted by Webb; who, in order to evince the truth of his measurements, ascertained the elevation of the Niti pass, by a series of observations made with four different barometers on the 21st of August 1818, to be 16,814 ft. above the level of the sea, though not a vestige of snow appeared on the crest of the pass, nor on a shoulder of the mountain 300 ft. higher. By this stubborn experimental fact, the limit of inferior congelation in 31° N lat. was demonstrated to be more than 17,200 ft. above the level of the sea, or 6,000 ft. higher than that stated in Leslie's tables, and 1,453 ft. higher than the limit on the side of Chimborazo.

"The mean height of the H. is stupendous, certainly not less than from 16,000 to 20,000 ft., though the peaks exceeding that elevation are not to be numbered, especially at the sources of the Sutlej; indeed, from that river to the Kali the chain exhibits an endless succession of the loftiest mountains on earth; forty of them surpass the height of Chimborazo, the highest but one of the Andes, and many reach the height of 25,000 ft. at least."

The following are the highest peaks which have yet been measured; and for the sake of comparison, we subjoin the altitudes of the highest observed summits in the South American Andes:

## I. HIMALAYA.

	in N lat.	30° 55'	E long.	78° 12'	25,669 ft.
Jamnatri,	"	30 22	"	79 50	25,598
Manda-Devi,	"	29 10	"	83 0	27,600
Dhawalagiri,	"	28 20	"	86 0	24,700
Gosain-than,	"	27 42	"	88 10	28,176
Kang-shang,	"	27 52	"	89 18	23,929
Chumulari,	"	27 50	"	92 50	21,600
The Zwillinge or Twins,	"	27 50	"	92 50	21,476

## II. ANDES.

Aconcagua,	23,199 ft.
Chimborazo,	21,424
Sorata,	21,286
Illimani,	21,149
Descabado,	21,100
Desyaccasada,	19,570

Subsequently to this survey of Kumaon by Webb, another survey of Gurwhal, or Sirinagar, was made by Messrs. Hodgson and Herbert, for the purpose of determining the altitudes of the H. in that district. This survey was not finished till 1821. It presents a list of 202 elevations, amongst which are 50 peaks. Successive surveys were also made by Gerard, from 1818 to 1823 inclusive, in Kunawar, bordering on Ladak. By these different surveys of Webb, Hodgson, Herbert, and Gerard, all the peaks of that portion of the H. extending from 78° 34' 4" E long. and 31° 53' N lat., to 81° 2' E long. and 29° 49' 43" N lat., were determined with the utmost apparent exactness. From these memoirs, and the elevations taken by Crawford on the Nepal frontier, and by Captain Blake, we subjoin the following tables, with the authorities for each:—

## I. ALTITUDES.

No.	Authorities.	Height.
1 Snowy range on the table land of the Indus,	Gerard,	29,000?
2 Dhawalagiri, or 'Great white mountain,'	Webb and Blake, Webb and Hodgson,	28,104? 25,749
3		
4 Swetagar, E of Dhawa- lagiri 36 miles,	Blake,	25,261
5	Crawford,	24,924
6	Do.,	24,809
7	Do.,	24,744
8	Blake,	24,108
9	Crawford,	24,418
10	Do.,	23,446
11	Hodgson and Herbert,	23,531

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12		Hodgson and Herbert,	23,441
13		Do.,	23,317
14		Webb,	23,263
15		Crawford,	23,236
16		Webb,	23,164
17		Hodgson and Herbert,	23,072
18		Do.,	23,062
19		Blake,	23,007
20	Surra-Rouini, near Gangutri,	Hodgson and Herbert,	22,906
21	St. Patrick, near the snowy arch of the Ganges,	Do.,	22,798
22	Mount Moira,	Do.,	22,792
23		Webb,	22,727
24	Poor Khyal, on the Spiti,	Hodgson and Herbert,	22,700
25	Peak of St. George, snow-bed of the Ganges,	Do.,	22,654
26		Webb,	22,635
27		Do.,	22,578
28		Do.,	22,498
29		Do.,	22,442
30		Do.,	22,419
31		Crawford,	22,419
32	Rudra-Himala, near Gangutri,	Hodgson and Herbert,	22,390
33		Webb,	22,345
34		Do.,	22,313
35		Do.,	22,277
36		Do.,	22,238
37		Do.,	22,058
38		Hodgson and Herbert,	21,964
39		Do.,	21,940
40		Blake,	21,935
41		Hodgson and Herbert,	21,772
42		Webb,	21,612
43		Hodgson and Herbert,	21,612
44		Webb,	21,439
45		Hodgson and Herbert,	21,412
46		Do.,	21,389
47	Pyramid peak,	Do.,	21,379
48		Webb,	21,311
49		Hodgson and Herbert,	21,178
50	Bunderpuch, or the Monkey's Tail,	Do.,	21,155?
51		Webb,	21,150
52		Do.,	21,045
53		Do.,	20,992
54		Do.,	20,923
55		Hodgson and Herbert,	20,916
56		Webb,	20,686
57		Hodgson and Herbert,	20,668
58		Do.,	20,668
59		Do.,	20,501
60	Peaks of the Hindu-kush above the valley of Peshawur,	Macartney,	20,493
61		Webb,	20,407
62	Sree Kanta peak,	Hodgson and Herbert,	20,296
63	Peak behind Shipke on the Sutlej,	Gerard,	20,150
64		Hodgson and Herbert,	20,122
65		Do.,	19,928
66		Webb,	18,857
67		Hodgson and Herbert,	19,530
68		Do.,	19,512
69		Webb,	19,497
70		Hodgson and Herbert,	19,481
71	Tawara peak,	Do.,	19,352
72		Crawford,	19,333
73		Hodgson and Herbert,	19,292
74		Webb,	19,153
75		Do.,	19,106
76		Do.,	19,099
77	Needle peak,	Hodgson and Herbert,	19,044
78	Jhala peak,	Do.,	18,795
79		Do.,	18,681
80		Do.,	18,798
81		Webb,	18,398
82		Do.,	17,994
83		Hodgson and Herbert,	17,425
84		Do.,	17,353
85		Do.,	17,337
86		Do.,	17,331
87		Do.,	17,174
88		Crawford,	18,960
89		Hodgson and Herbert,	17,035
90		Do.,	17,044
91		Do.,	17,017
92		Do.,	16,982
93		Crawford,	16,803
94		Hodgson and Herbert,	16,203
95		Webb,	15,811
96		Do.,	15,733
97		Do.,	15,246

In the above Table, No. 1 was observed by Gerard from Hangrang in 1813. "I stood on the crest at noon," says he, "the

therm. 25°. In front was a granitic range of most desolate aspect; not a blade of vegetation visible; the snow itself only finding a resting place at 19,000 ft. Beyond it, through a break, were seen snowy mountains, pale with distance, appearing to rise out of the table-land on the banks of the Indus; and from the angles of alt. which I observed, their pale outline, and the broad margin of the snow, they cannot be less elevated than 29,000 ft. The impression which their faint cloud-like appearance leaves on the mind of the spectator who views them on the verge of the horizon, language fails to convey. It is like something we have seen, but of which the idea retained is vague and ill-defined, appearing, through the dimness of distance, as objects mingling with the skies. As I had no time nor place for fixing their position, I adopted Humboldt's plan of vertical lenses, the results of which should give an approximation to their height." He observed it also from the pass of Keobrung, and says, that it was so completely covered with snow that not a rock was distinguishable even by a telescope of large magnifying power.—No. 2 was measured from different stations by Webb, and his measurements were confirmed by those of Captain Blake in 1814; but Captain Hodgson estimates Dhawalagiri at over 27,600 ft.—No. 3 is given at 25,669 ft. by Webb, and 25,829 ft. by Hodgson and Herbert. The mean between the two measurements is 25,749 ft. as given in the table.—No. 18 seems to be the peak, 4 m. to the N of Kedarnath temple and whose height is given by Webb at 22,840 ft., difference 222 ft. It is denominated the Sumeru Purbut or 'great mountain Meru,'—an appellation commonly given by the Hindus to very lofty mountains. Its angle of alt. above that temple is 26° 15' 15", and it is elevated above it 11,062 ft.; the temple itself being 12,000 ft. above the sea.—No. 20 is not more than 5 m. from the temple of Gangutri, and is elevated 12,586 ft. above it. Its angle of alt. from Gangutri must be enormous. Nos. 21, 22, and 25, are more than 10,000 ft. above the bed of the Ganges, though not more than from 6 to 8 m. distant, and surround the snowy vale from which it emerges.—No. 24 is given at 22,488 ft. by Gerard, or 212 ft. less than the table from Hodgson. This vast mountain rises to the height of 14,662 ft. above the Spiti which is washed by its base. Such an elevation from the immediate bank of a river has no parallel in any mountain of the globe, so far as known to us.—Nos. 30, 38, 39, and 41 belong to the Gangutri valley, and are like No. 20 invisible from the plains of Hindostan.—No. 45 is the huge Ruidung peak, which at the distance of only 5 m. from the village of Ribe, near the Baspa, makes an angle of 27° with the horizon, and an elevation of 13,412 ft. above that place.—No. 47, or the Pyramid peak, was distant only 14,800 ft. from Hodgson and Herbert's station near the great snow-bed of the Ganges, and had an angle of elevation of about 33°, and 8,465 ft. of height above their station. To form a proper idea of the imposing appearance of such a snowy peak, seen at so short a distance and with such an angle of elevation, it may be remarked that, if even when viewed from the plains of Hindostan, at angles of elevation of 1° and 1½°, the H. peaks towering over many intermediate ranges of mountains, inspire the mind with ideas of their grandeur, at so vast a distance, how much more sublime must they appear when their whole bulk cased in snow from the base to the summit at once fills the eye. It falls to the lot of few to enjoy the pleasure of contemplating so magnificent an object as a snow-clad peak rising to the height of more than 1½ m. at the short horizontal distance of only 2½ m.—No. 49 is the high conical peak at the source of the Baspa.—No. 50 is the highest peak of the Jumnotri range at the source of the Birah-Ganga, the main branch of the Jumna; but an alt. in this quarter has since been stated by Hodgson at 25,669 ft.—Nos. 57, 58, 59, belong to the large three-peaked mountain between the sources of the Tonse and Rupin.—No. 60 is the elevation of the Hindu-kush peaks taken by Macartney, above the valley of Peshawur. But that valley itself cannot be less than 1,500 ft. above the level of the sea, and consequently the absolute height of these peaks must be 22,000 ft.—No. 62. This peak was supposed by Fraser to be the highest in the valley of the Baghirathi, and to be far higher than Bunderpuch, which was presumed by Barrow, in his review of Fraser, to be 25,000 ft. high, as had been previously determined, but erroneously, by Webb, who had placed it 23° too far N from his point of observation. The ascertained height in the table, has proved that Fraser and Barrow were both wrong.—No. 63 makes an angle of 28° above the point of Shipke. E of Purkhyal, the banks of the Sutlej are bristled on both sides with a succession of sharp snowy pinnacles more than 20,000 ft. high.

The subjoined table of passes, determined in the cases marked B by the barom., will give some idea of the elevation of the ridges themselves, as in continuous ranges these are always the lowest parts of the *jugum* or ridge. It is these, and not the peaks, which indicate the mean elevation of the range, or great buttress rather, that is itself the base of the peaks,—the latter being the culminating points, and the former the minima points of the crest. In the Alps and the Caucasus, the relation of the minimum of crest is to the culminating points as 1 to 2, or the latter are double the elevation of the former. But in the H., so far as observed, the crest is to the peaks as 1 to 1.8. From the subjoined table it appears

that the mean height of the H. is upwards of 17,000 ft., and not, as Humboldt imagines, only equal to the culminating points of the Alps. The passes below 16,500 ft. do not belong to the main crest, but to the lateral ridges or ribs projecting from the spine, and to the S ridge of the H. Humboldt assigns near 12,000 ft. as the mean elevation of the crest of the Andes; but this can only be applied to the Andes of Quito. The mean elevation of the passes of the Andes of Titicaca is from 15,030 to 15,195 ft., and even this is 2,000 ft. lower than the mean height of the H. range. It must be admitted, however, that where mountains form groups or clusters, and not a continuous line, it is impossible to determine the mean height from passes.

## II. PASSES IN THE GREAT HIMALAYA.

	Feet.
1 Pass crossed at the NE frontier of Khunawur, near the stone bridge, by Dr. Gerard, upwards of (B)	20,000
N.B. Gerard attained this elevation without crossing the perpetual snow. This is undoubtedly the highest spot on the globe hitherto attained by man. It is higher by 800 ft. than Humboldt attained on the side of Chimborazo.	
2 Point of elevation attained by Gerard, in 1818, on the mountain Fargiala, near Nako, on the Sutlej, by the barom.	19,411
The same taken geom., in 1821.	
3 Pass into Tibet by Lebong, crossed by Webb, (G)	19,442
4 Do. of Manerung, crossed by Gerard, in 1818 and 1821 (B)	18,871
5 Do. Keoubrung, do. do. (B)	18,612
6 Do. Gangtang, do. do. (B)	18,313
7 Do. Shirang, from Shipke to Gortope, upwards of N.B. Only one small stripe of snow on it.—Gerard.	18,295
8 Do. Oota-Dhoora, a day's march beyond Milam. Monson, (B)	18,300
9 Do. at the head of the Bhannevie. Hamilton,	17,780
10 Do. of Lachung, in N lat. 28°, and a little to the E of 88° 30' E long.	18,000
11 Do. of Takklacote, crossed by Webb in 1816, (G)	17,598
12 Do. Meyang-La, from Shipke to Gara, (B)	17,760
13 Do. Charang, crossed by Gerard in 1821, (B)	17,348
14 Nitee pass, crossed by Webb 1818, (B)	16,814
15 Do. of Wallanchung, to the W of Kanglachem pass, in E long. 87° 35'. Hooker.	16,700
16 Pass between Shipke and Ladank. Gerard, (B)	16,500
17 Kongma pass, between Numjea and Shipke. Gerard, (B)	16,007
18 Kanglachem pass, in 87° 40' E long. Hooker,	16,000
19 Kimlia pass, attempted by Gerard in 1821,	17,000
20 Nibrang pass (Southern Himalaya), (B.) Gerard,	16,035
21 Gumsa do. do. (B.) do.,	16,020
22 Yusu do. do. (B.) do.,	15,877
23 Ghnsul do. do. (B.) do.,	15,851
24 Shotul do. do. (B.) do.,	15,556
25 Lachen do. over the Kongra-Lama, to the W of Lachung pass. Hooker,	15,500
26 Bamsuru pass from the Jumna to the Ganges. N.B. This pass was crossed by Fraser in 1816, and by Hodgson in 1818.	15,447
27 Buranda pass, crossed by Fraser, from the Pabur to the Sutlej. Gerard, (B)	15,248
28 Nalgun do., crossed by Fraser. Gerard, (B)	14,891
29 Hangarang do., N side of the Sungnaum valley. Gerard, (B)	14,837
30 Snow bed of the Ganges. Hodgson and Herbert. N.B. Farther advance was impracticable for snow.	14,600
31 Runung pass, S of Sungnaum,	14,500
32 Point of emersion of the Ganges from the snow,	13,800
33 Lapcha pass from Shealkur to Surma,	13,625
34 Tungrung do. from Marang to Nisung,	13,739

No. 10 in the above table was first visited by Dr. J. D. Hooker in 1849. No. 11 is the most eastern pass measured by Webb. Takklacote is at the N foot of the range in Chinese Tartary. But beyond Takklacote another range must be crossed before we can arrive at the valley of the Mansaroar lake, and at the station of Gurdon or Gharewdhoon, the abode of a Chinese deputy.—No. 3 lies to the W of this, and is the highest pass crossed hitherto next to that attained by Dr. Gerard.—No. 3 was not crossed till 1827. It lies E of the Niti pass, and a day's journey N of Milam village in the purgunnah of Juwahir, the most northern station of the Juwahir Bhotiyas. Herbert was unable from indisposition to scale this pass, but his assistant, Monson, advanced to it, and found it to be loftier than those of Niti and Takkla-

cote crossed by Webb. It is on the road to Gortope or Gertokh; and between it and this pass are several ridges of equal elevation. The whole space is destitute of vegetation, the road being for one march on this side of the pass more than 1,000 ft. above the line where shrubs of any kind are found. This pass is practicable only two months in the year. During the rest it is blocked up by the snow. Notwithstanding the difficulties of the journey, however, this is the most frequented pass throughout the whole range by the Bhotiya traders. It is computed that above 7,000 sheep, the only beasts of burden used in the Himalaya country, pass this mountain annually, importing about 9 or 10,000 maunds of salt and borax. Here we have another proof, amongst many, of the absurdity of determining by mere lat. the inferior line of perpetual snow, as at this elevation of 17,780 ft. the pass is two months free from snow.—No. 4 leads from the valley of Sungnaum, over the range to the NW into the Spiti of Ladak, and is tremendously difficult, as Gerard experienced in September 1821. It is not so much the intensity of the cold as the presence of wind, that causes fatal consequences in these elevated regions. Captain Gerard found the cold endurable at an alt. of 18,700 ft. when the therm. was 22° below the freezing-point, during a perfect calm; but at another time was almost frozen in a temp. of 4° above 32°. Mr. Strachey, in an article in the 20th vol. of the *Geographical Journal*, says, "The valleys that traverse the mountains between the snowy ranges and the plains are for the most part little more than gigantic ravines, at the bottom of which flows the river each contains, in a very contracted channel, which at intervals only opens out into an alluvial flat, capable of cultivation. The level of the bottom of these valleys is, of course, very various; but in tracing up the courses of the larger streams we usually arrive within 10 miles in a direct line from the snowy peaks, without having risen to more than 4,000 or 5,000 ft. In proceeding, however, we find that where we cross the line on which the great peaks are situated the ascent very rapidly increases, and a very few miles carries the river-bed up to an altitude of 9,000 or 10,000 ft.; thus showing that the sudden increase of height of the mountains along this line is not confined to the peaks alone, but is a general elevation of the whole surface. As we pass to the N from the line of greatest elevation, the diminution of the altitude of the ridges is not much, while the level of the bottom of the valleys is constantly increasing in height; it is, therefore, not improbable that the mean height of the whole may actually increase as we recede from the great peaks until we reach the watershed of the streams that flow to the S, which is found at about 25 m. to the N of those peaks. In passing through the most elevated portions of the mountains, the traveller, who naturally expects to see scenes of surprising magnificence amid these gigantic snow-clad pinnacles, is too often doomed to be disappointed; for, in his painful progress along the narrow gorges that traverse these regions, he can but seldom see anything beyond the rocks that frown immediately over his head. Exceptions however there are, though few, to this rule, and we are sometimes able to snatch from the summits of the higher passes, in the rare intervals during which they are not shrouded in mist, views of stupendous and chaotic masses of mountain that fill the mind with astonishment and awe. Nor is the scene that presents itself, when we at length reach the watershed, less remarkable. After weeks have been spent in traversing mountain after mountain, of the seeming interminable succession of which the eye begins to tire, while the incessant roar of the torrents

that rush by begins to weary the ear, we are here suddenly arrested by seeing spread out before us a plain, that without sign of water, of vegetation, or of animal life, stretches away, as far as the eye can reach, in a north-westerly direction; behind which rise mountains that gradually fade away in the distance, with here and there only a peak lightly tipped with snow. This, in fact, is the very plain which was seen by some of the earliest missionary travellers in Tibet, and the account of whose existence gave rise to the idea that the whole country was a vast plain of immense altitude. When it became apparent, as it ultimately did from the accounts of subsequent travellers, that a great part of Tibet was a confused mass of mountain, doubts were thrown on the existence of any plains at all, and it has become necessary, so to speak, to re-discover this very remarkable feature of these mountains. The plain immediately to the N of the British Himalayan provs. is about 120 m. in length, and 15 to 60 m. in extreme breadth. The mountains that bound it to the N, as I have already noticed, hardly appear to be what we should call snowy, and they are by no means so high as the ranges of the H. on its S edge. The height of the celebrated peak Kailás has been determined by purely trigonometrical operations to be not quite 22,000 ft.; while another peak, more to the W, one of the few that just entered the region of perpetual snow, was similarly found to be little above 20,500 ft. The surface of the plain itself, which has been traversed throughout its length by my brother Captain Henry Strachey, as well as to a less extent by myself, in company with Mr. Winterbottom, varies in elevation from above 16,000 ft. along its southern edge to about 15,000 in its more central parts, where it is cut through by the river Sutlej, which flows at the bottom of a stupendous ravine furrowed out of the alluvial matter of which the plain is composed to a depth not much less than 3,000 ft. As we advance into the eastern parts of the plain, we find that it gradually becomes more obstructed with mountains, which rise abruptly from the level surface like islands and rocky coasts from the sea; and if at any time it requires but little effort of the imagination to reproduce to the mind the picture of the days long gone by, when an ocean rolled over this expanse, now upraised above the level of the highest of the puny mountains of Europe, even that little is sometimes not needed when the mirage that plays over the arid surface of the ground, under the influence of the intense heat of the sun's rays, unrolls before the eye its fairy vision of the things that were."

**Geology.]** It is said that gneiss is the prevalent rock in the H. This is however as yet but mere conjecture, as the geological composition of the range has been but very partially examined by mineralogists. Throughout the H. comparatively little granite has as yet been detected; the most extensive rock being gneiss; a circumstance which might lead geologists to assert that the present H. vast as they are, are but secondary to some more mighty formation that once existed. From the plains through the first and second or Sivalik ranges of hills, to the great barrier itself, there appears to be a series of bands of supermedial rocks succeeded by sandstones and limestones, and transition rocks reposing alternately on mica slate, gneiss, or granite. "The first great mass of mountain," says Mr. Strachey, "which rises over the outer hills and 'Dûns' consists of argillaceous schists, grits, and limestones, all devoid of fossils, and it is not till we pass beyond the line of greatest elevation that we find any trace of organic remains to guide us in our speculations as to the age of the strata with which we meet. The whole area between the outer hills or the sandstones that succeed them, and these fossiliferous beds, is made up of every variety of metamorphic rock, amongst which several lines of eruptive action are met with, all following more or less the general line of the strike. Two lines of granite are thus found to traverse this portion of the mountains, the more northern of which is coincident with the line of greatest elevation, while the other, which is of a totally different mineral character, appears to have no very marked influence on the elevation of the surface. Several distinct lines of eruptive rocks of the greenstone order have likewise been traced. It may also be noticed

that the actual quantity of granite in these districts is on the whole small; the granite that follows the line of maximum elevation is chiefly in the form of veins, and in very few instances expands into mountain masses, the great peaks for the most part being composed of stratified rocks, as may be very distinctly seen from a great distance. Immediately following the crystalline schists that accompany the northern line of granite, we find a considerable thickness of slaty beds, both argillaceous and calcareous, on which rest strata that are certainly of Silurian age. The fossils obtained by me from these beds, the upper part of which rises to a height of between 19,000 and 20,000 ft., have been partially examined by Mr. Salter, and he has no hesitation in ascribing them to the Silurian period. Succeeding the palæozoic strata we find a remarkable bed, apparently quite analogous in the form of its fossils to the muschelkalk of Europe; and still ascending we come to oolitic beds, among which the presence of the Oxford clay is well marked, while the lias seems to be altogether wanting. But probably the most remarkable feature of the geological structure of these mountains is that to which I shall next advert. The plain of Tibet is found on examination to be a tertiary deposit of boulders and gravel, which has attained its present wonderful elevation, above 15,000 ft., without any sensible disturbance of the horizontality of the beds in which it was originally laid out. Bones of elephant, rhinoceros, and horse, the latter apparently identical with the horse of the Siwaliks, also of some large undetermined ruminant, as well as of a new species allied to the goat, are found embedded in these strata. The existence of such animals in the country in its present state being a physical impossibility, there can be no doubt that these strata have been elevated from some lower level since the time of their deposition. There is no direct proof that these beds are marine, no shells having been got from them, and they might possibly have been laid out by some large body of fresh water at a considerable elevation above the sea; but it appears to me to be far more probable that we have a real sea-bottom to deal with. The general extension of some of the older fossiliferous rocks along the northern face of the H. over a very great longitudinal distance, is a fact of which we have certain proof. It follows, therefore, that the line on which they occur, distant about 20 or 30 m. to the N of the great Himalayan peaks, has been a sea-margin from the remotest ages of the earth's history till as late, certainly, as the oolitic period. The existence of other plains, apparently of a similar nature, at distant points along the mountains, seems to indicate the probable extension of the body of water by which these tertiary strata were formed, to such dimensions as would, of necessity, show that it was the ocean and no lake."

**Vegetation.]** The general upper limit of the forest on the S face of the H. is about 11,500 ft. above the level of the sea; oaks and pines reach that alt.; birches ascend a few feet higher; and juniper has been seen growing at 13,300 ft. of elevation. The prevailing trees are the oak, pines of great variety, and rhododendrons; the smaller trees are *juniperus*, *salix*, and *ribes*; the grasses, *agrestis*, *poa*, *festuca*, *bromus*, and *phleum*. The extreme height of cultivation on the S slope is 10,000 ft.; the highest habitation is 9,500 ft. On the N slope villages are found at 13,000 ft.; cultivation at 13,600 ft.; fine birch trees at 14,000 ft.; and furze at 17,000 ft. Captain Strachey carries the extreme limit of vegetation N of the great snowy peaks to 19,000 ft., and saw a variety of barley growing at 15,000 ft. alt. in Ladak.—As to animals, the *entellus*, of the monkey family, here ascends to 9,000 ft.; and the tiger, leopard, and others of the feline tribe, follow their prey to about the same height. The ounce has his peculiar abode in the higher parts of Tibet, but occasionally commits ravages among the flocks down to 11,000 ft. The wild dog and hog abound; the *Cervus jurao*, or great stag, is common, as is also the *Cervus rutia* or 'barking deer.' The different species of antelopes are generally found in the higher regions. The *kyang* or wild ass roams over the plains to the N of the H.; and the wild sheep is common both in Tibet and the higher parts of the H. The yak forms the only species of horned cattle in the higher parts of Tibet, and is met with wild along the S edge of the plateau. The eagle and vulture are seen on the highest peaks; the hoopoe, at an alt. of 16,500 ft.; bustards, ducks, and teal at 15,500 ft.; pheasants, partridges, and crows abound everywhere. The lakes and smaller streams abound in fish.

**Snow line.]** Dr. J. D. Hooker, whose recent explorations of the H. extended from Chumalari westward to the head-streams of the Tambar in about 87° 35' E. long., estimates the line of perpetual snow at about 17,000 ft. on the S slope of the range



in this quarter; and 18,000 ft. on the N or Tibetan side. Mr. Royle offers the following explanation of the remarkable fact, that the limit of the line of snow rises higher on the northern than on the southern flank of the H. "From the details which have been given, it seems abundantly clear that the elevation of the Indian snowy range is sufficient to prevent the passage across of the cloudy masses which deluge the plains of N. India with rain, both in the cold and in the warm season. The atmosphere, therefore, on the N face of the H. preserves unimpaired the dryness which is the characteristic of the rarefied air of lofty situations; hence the little deposition of snow which takes place in winter in proportion to the lowness of the temperature. The returning warmth of spring rapidly dissolves this thin layer of snow from level places, in consequence, it appears, of the undiminished power of the solar rays in passing through so rare and transparent a medium; a fact tending to confirm Mr. Daniel's views respecting the superior energy of the solar rays in the higher regions of the air; and as this seems already to have been done with respect to his opinions of their great power in polar regions, the fact is interesting as giving an additional cause for the analogy between alpine and polar vegetation. When the snow is once melted, these elevated tracts, surrounded and confined by towering mountains, absorb heat as readily during the presence of the sun as they radiate it freely while he is absent; and becoming, like the surface of the earth at ordinary levels, the source whence the heat received from the sun is diffused to surrounding objects, they cause the line of perpetual congelation to recede higher and higher in proportion to their own elevation. Peaks and pinnacles, on the contrary, projected into the air like promontories into the ocean, partake rather of the equality of temperature of the media into which they intrude, than impress on them, like plains and table-lands, their own extremes of heat and cold."

**HIMBERG**, a town of the archduchy of Austria, in Lower Austria, circle of the Lower Wienerwalde, 9 m. SSE of Vienna, near the confluence of the Kallengange with the Triesting-bach. Pop. 1,230. Chintz, muslin, and linen are manufactured here.

**HIMBLETON**, a parish of Worcestershire, 4 m. SE of Droitwich, on a branch of the Avon, and on the line of the Birmingham and Gloucester railway. Area 2,040 acres. Pop. in 1831, 478; in 1851, 402.

**HIMBLATAUELLE**, a military post of the island of Ceylon, in the district of Ouva, situated on the summit of a bleak hill, 4,000 ft. above sea-level, to the SW of Mount Namma-Couly-Kandy, and 42 m. SE of Kandy.

**HIMER (SAINT)**, a village of France, in the dep. of Calvados, cant. and 2 m. S of Pont-l'Evêque, and 27 m. ENE of Caen. Pop. 1,060.

**HIMLE**, a haerad of Sweden, in the N part of the prefecture of Halmstadt, between the haerads of Wiske and Fauras. Warberg is its chief town.

**HIMLEY**, a parish and village of Staffordshire, 3½ m. W of Dudley. The Stafford and Birmingham canal passes about 1½ m. W of the village. Area of p. 1,185 acres. Pop. in 1831, 156; in 1851, 400.

**HIMMELPFORTEN**, a town of the kingdom of Hanover, in the gov. and 9 m. W of Stade. Pop. 420.

**HIMMELSKRON**, a town of Bavaria, in the circle of Upper Franconia, 10 m. NNE of Bayreuth, and 32 m. NE of Bamberg, on the l. bank of the White Main. Pop. 682. It has a royal castle, and an ancient monastery.

**HIMMELSTADT**, a village of Prussia, in the prov. of Brandenburg, regency and 45 m. NE of Frankfurt-on-the-Oder, circle and 5 m. NNW of Landsberg. White iron is manufactured here.

**HINA**, a district of Ceylon, in the W part of the island, to the N of the district of Hevagam, to the S of those of Allont-cour and to the W of that of Beligalé. It is watered on the S by the Kalenyganga.

**HINAUMETZ**, a commune of Belgium, in the prov. of Hainault, dep. of Thieulain. Pop. 155.

**HINCASTER**, a township in the p. of Heversham, Westmoreland, 2½ m. NNE of Milnthorpe. Area 770 acres. Pop. in 1831, 156; in 1851, 148.

**HINCHE**, a town of Hayti, in the dep. of Ozama, 36 m. S of Port Liberty, and 60 m. NNE of Port-au-Prince, at the confluence of a river of the same name with the Guayanco. Pop., with dependencies, 4,500. The river H. forms an affluent of the Artibonite.

**HINCHINBROOK**, an island of the South Pacific, in the archipelago of the New Hebrides, a little to the N of Sandwich island, in S lat. 17° 33', E long. 168° 20'.—Also an insular mountain of New South Wales, on the shore of the Pacific, to the SE of Rockingham, and to the N of Halifax bays, in S lat. 18° 25', E long. 146° 30'. It rises to the height of 2,500 ft. above sea-level, and is visible at sea at the distance of 18 leagues.—Also a township of Lower Canada, in the co. of Beauharnois, bounded on the S by the United States, and separated from Godmanchester by the Chateauguay. It comprises an area of 38,000 acres, to some extent hilly, but tolerably fertile. In some parts are swamps covered with cedar, spruce fir, and hemlock trees; and the rising grounds are thickly covered with timber. Towards the Chateauguay are gentle slopes and fine meadow-land, watered by the affluents of that river. Pop. 1,214. The v. of H., or Huntingdon, is built on each side of the Chateauguay, partly in H., and partly in Godmanchester, and is connected by a bridge 240 ft. in length. Pop. 125.

**HINCHINBROOK, or TKHALKHA**, an island of the N. Pacific, near the S coast of Russian America, at the entrance of Prince William's sound, in N lat. 60° 24', W long. 146°. It is 24 m. in length from NE to SW, and 12 m. in breadth, and terminates in the S in a cape of the same name. The coasts are extremely irregular, and present numerous bays. Of these, one of great extent lies to the NE; and to the S is Port Constantine and Helen.

**HINCHINBROOKE**, a township of Upper Canada, in the Midland district. Near its centre is a large lake, with an island in the middle, and several small lakes are scattered over its surface.

**HIN-CHU**, a division and town of China, in the prov. of Shan-si. The div. comprises 2 districts, viz., Ting-jang-heen and Tsing-heen. The town is 45 m. NNE of Tae-yuen, on an affluent of the Houto-Ho, in N lat. 38° 26'.

**HINCKLEY**, a parish and market-town in Leicestershire, 13½ m. SW of Leicester, and 99 m. NW by N of London. The p. comprises the township of Hinckley-Bond, the chapelries of Dadlington and Stoke-Golding, and the hamlets of Wykin and Hydes-Pastures. Area 6,200 acres. Pop. in 1801, 5,676; in 1831, 7,180; in 1851, 7,071.—The town, which is the principal one in the hund., is pleasantly situated on an elevated table-land, near the borders of Warwickshire. It formerly enjoyed the privileges of a borough. It is one of the polling-places for the members for the S division of the co. The manufacture of hosiery is carried on here to a very considerable extent. Excepting Leicester, more stockings have been manufactured in H. than in any other place in the kingdom; the inhabitants have long been chiefly employed in this manufacture, which was introduced here in 1640. It is computed that there have been upwards of 2,500 frames employed in the town and the villages in its vicinity, giving employment to 6,000 persons. The coarser kinds of stockings, both cotton and worsted, are chiefly produced here. H. has likewise manufactories of coarse cotton, thread, and worsted.

**HINCKLEY**, a township of Medina co., in the state of Ohio, U. S., 132 m. NNE of Columbus, watered by a branch of Rocky river. Its surface is elevated, but its soil is fertile, and affords grain, as well as excellent pasturage. It contains red sandstone, iron-ore, and coal, in considerable quantities. Pop. in 1840, 1,285.

**HINDAOU, or GARTAAH**, a district of Nubia, in the territory of the Kenous, on the l. bank of the Nile, 20 m. SSW of Es-Souan. It is celebrated for the numerous ruins which it contains. The only

habitations to be found here are a few miserable cabins.

HINDELANG, a market-town of Bavaria, in the circle of Suabia, 17 m. S of Kempten. Pop. 1,288.

HINDELBANK, a village of Switzerland, in the cant. and 9 m. NE of Berne, bail. and 5 m. W of Berthoud. It has a church, in which is a fine mausoleum of the sculptor Nahl; and in the environs are 2 castles. Pop. 960.

HINDELOPEN, or HINDELOOPEN, a seaport town of Holland, in the prov. of Friesland, capital of a cant., in the arrond. and 14 m. SW of Sneek, and 27 m. SW of Leeuwarden, on the Zuyder-Zee. Pop. 1,207. Ship-building, fishing, and navigation, form the chief branches of local employment.

HINDELWANGEN, a village of Baden, in the circle of the See, N of Stokach. Pop. 280.

HINDERCLAY, a parish in Suffolk, 14 m. NE of Bury-St.-Edmunds. Area 1,458 acres. Pop. in 1851, 394.

HINDERWELL, a parish in the N. R. of Yorkshire, 8½ m. WNW of Whitby, on the coast of the North sea. Area 4,400 acres. Pop. in 1851, 1,947.

HINDIA, a town of Hindostan, in the prov. of Kandeish, capital of the district of the same name, 102 NE of Buranpur, pleasantly situated on the l. bank of the Nerbudda, opposite Nemavor, with which it is connected by a bridge 1,000 yds. in length. It is populous, and has a fort which commands the river, but possesses little military strength. The district is bounded by the Nerbudda on the N, and on the SE by the Calyngong or Caligrama hills. Its chief towns are Hindia, Hussingabad, and Charwan.

HINDIAN, a nomade tribe of Arabs, who inhabit the shores of the Persian gulf, in the prov. of Fars.

HINDKEES, a people of Afghanistan, of Indian origin. They are more numerous than the Tajiks, with whom they divide the local commerce. Their language bears a close resemblance to that of the dialect of the Punjab.

HINDLEY, a chapelry in the p. of Wigan, Lancashire, 2½ m. ESE of Wigan, in the line of the Wigan and Newton railway. Area 2,522 acres. Pop. in 1831, 4,575; in 1851, 7,023.

HINDLIP, or HINLIP, a parish in Worcestershire, 3 m. NNE of Worcester, in the line of the Birmingham and Gloucester railway, and of the Worcester and Birmingham canal. Area 1,054 acres. Pop. in 1831, 134; in 1851, 126.

HINDOEN, one of the Lofoden islands, in the Arctic ocean, near the NW coast of Norway, dio. of Nordland, between 68° 25' and 69° 2' N lat., and 14° 20' and 16° 10' E long. This island, which is the largest of the Lofoden group, is separated from the continent by a narrow channel, and lies to the E of the islands of Ost-Vaagen, Hasselt, and Langöen, and to the S of that of Andöen. It is 54 m. in length from NE to SW, and about 30 m. in breadth; and is divided into two nearly distinct parts by the Gullefjord, an arm of the sea running S, the western section belonging to the bail. of Nordland, and the eastern to that of Finmark.

HINDOLVESTON, or HILDERSTON, a parish in Norfolk, 3 m. N of Foulsham. Area 2,490 acres. Pop. in 1831, 797; in 1851, 748.

HINDON, a parish, borough, and market-town in Wilts, 8 m. SSE of Warminster, and 94 m. WSW of London. Area 212 acres. Pop. in 1831, 991; in 1851, 710.

HINDONE, a town of Hindostan, in the prov. and 65 m. SW of Agra, belonging to the rajah, and 74 m. ESE of Jypur. It was formerly large and populous, but has been greatly reduced by the frequent incursions of the Maharattas. It is chiefly built of dark red sandstone, squared in large masses, and finely polished, and contains 2 spacious chowks, with a Hindu temple in each.

## HINDOSTAN.

The classical appellation, *India*, seems to have been anciently given to the whole of that vast region which stretches from Persia and Bactria on the W, to the country of the Sina or Chinese on the E; and from the Scythian desert on the N, to the ocean on the S. Within these stupendous limits, comprising an area of 40 degrees both of lat. and long., were included the lofty mountain-ranges of Tibet,—the romantic valley of Cashmere,—all the rugged domains of the old Indo-Scythians,—the countries of Nepal, Butan, Kamrup, and Assam,—together with Siam, Ava, and Arracan, and the bordering states as far as the China of the Hindus,—the island of Ceylon, and the whole Western peninsula. The name itself is generally supposed to have been derived from the river Indus, which waters the W extremity of this region. Under the appellation of *India beyond the Ganges*, some writers have comprised the whole group of countries lying between the bay of Bengal and the Chinese sea. In the early part of the 15th cent. we find India made to comprehend nearly the same portion of the globe as that on which we so vaguely bestow the appellation of *East Indies*, the islands of the Indian archipelago being included.

The modern name *Hindostan*, or *Hindisthan*, is a Persian appellation; and if, as some regard it, composed of the words *hindu*, 'black' or 'swarthy,' and *stahn*, 'a place,' signifies 'the black or swarthy country.' According to other philologists, the term *Sind'hu*, signifying in the ancient Indian language 'the ocean,' was originally given to the largest river of India; whence the Persians called the country separated from them by that river *Sind'husthan*, or *Hindisthan*, i. e., 'the Sindian' or 'Indian country;' the substitution of *h* for *s* being common in the early languages of this region of the globe. By Mahomedan writers the term *Hindostan* was applied to the countries immediately subject to the Mogul sovereigns of Delhi, or the eleven provinces lying to the N of the Nerbudda; while the tract to the S of that river was denominated the *Deccan*, or 'south country.' By the Bramins, Hindostan is denominated *Medhyana*, or 'central,' and *Punjab'humi*, or 'the land of virtues'—appellations vague and unmeaning in geography. Some modern geographers consider the limits of Hindostan as co-extensive with those of the Hindu religion. "This delineation," Hamilton remarks, "has the advantage of being singularly well-defined on three sides by strong natural barriers." According to this arrangement, H. is separated, on the N, from the table-land of Tibet, by the lofty chain of the Himalaya mountains. To the S, it is everywhere bounded by the ocean; and on the W by the course of the river Indus. Its limits on the E are more difficult to define; "but the most distinct are the range of hills and forests that skirt the Bengal districts of Chittagong and Tiperah, and stretch N to the Brahmaputra, near to where that immense river, after having long flowed almost due W, makes a sudden sweep to the S. In this NE corner the Hindu religion is irregularly diffused, as it extends, far beyond the limits assigned, into Assam and Cassay, while that of Buddha prevails in Butan, and protrudes into the Brahminical regions on the banks of the Tista."

*Boundaries and extent.* H., then, assigning to it the limits thus indicated, is bounded on the N by the S front of the Himalaya, which, commencing near the Indus, and circling Cashmere on the N, runs in an uninterrupted line, with a southern inclination, beyond the eastern extremity of the con-

try; on the E. by Arracan, Cassay, and the Langtang mountains; on the SE, by the bay of Bengal; on the S and SW, by the Indian ocean; and on the W, by the course of the Indus. According to these boundaries, the extreme length of H. from N to S, is 27 degrees of latitude—viz. from Cape Comorin, in 7° 57', to the crest of the Himalaya, in 35° N lat.—or 1,820 geog. m., which are equivalent to 1,880 British m. Its length from E to W, or from the mountains which, in 92° E long., separate the circle of Sihat from Cassay, to the NW mouth of the Indus, in 67° E long., is 25 degrees, which, in that latitude, are equal to 1,400 geog., or 1,620 British m. These boundaries comprise an area of 1,100,000 geog., or 1,280,000 English sq. m., according to Arrowsmith's large map of India, and Hamilton's *Statistical Description of Hindostan*. We apprehend this approximation must be near the truth; but, until the trigonometrical survey shall be extended over the whole, we cannot speak with perfect assurance on this point.—The following table of the classification, area, and pop. of the political divisions of this great region, was originally formed, in 1820, by Mr. Hamilton:

	British sq. m.	Pop.
<b>I. BRITISH TERRITORIES.</b>		
Bengal, Bahar, and Benares.	162,000	39,000,000
Additions in Hindostan since 1765.	148,000	18,000,000
Gurwal, Kumaon, and the tract between the Sutlej and the Jumna.	18,000	500,000
<b>Total under the Bengal presidency.</b>	<b>328,000</b>	<b>57,500,000</b>
Under the Madras presidency.	154,000	15,000,000
Under the Bombay presidency.	11,000	2,500,000
Territories in the Deccan, &c. acquired since 1815, consisting of the Peishwa's dominions, &c., and mostly attached to the Bombay presidency.	60,000	8,000,000
<b>Total under British government.</b>	<b>553,000</b>	<b>83,000,000</b>
<b>II. BRITISH ALLIES AND TRIBUTARIES.</b>		
The Nizam.	96,000	10,000,000
The Nagpur raja.	70,000	3,000,000
The king of Oude.	20,000	3,000,000
The Guicowar.	18,000	2,000,000
Kotah, 6,500; Bundi, 2,500; Bopal, 5,000.	14,000	1,500,000
The Mysore rajah.	27,000	3,000,000
The Satara rajah [annexed in 1842].	14,000	1,500,000
Travancore, 6,000; Cochin, 2,000.	8,000	1,000,000
Under the rajahs of Jodpur, Jeypur, Odipur, Bikanir, Jesselmere, and other Rajput chiefs, Holcar, Amir-Khan, the Row of Cyth, Bhurtpur, Macherry, and numerous other petty chiefs, the amirs of Sind, Sikhs, Gondis, Bhils, Coolies, and Cattles, all comprehended within the line of British protection.	283,000	15,000,000
<b>Total British government and allies.</b>	<b>1,103,000</b>	<b>123,000,000</b>
<b>III. INDEPENDENT STATES.</b>		
The Nepal raja.	58,000	2,000,000
The Lahore raja.	50,000	2,000,000
The amirs of Sind.	24,000	1,000,000
The dominions of Sindia.	40,000	4,000,000
The Cabul sovereign, E of the Indus.	10,000	1,000,000
These last four territories may now [1851] be regarded as incorporated with British India.		
<b>Grand total of Hindostan.</b>	<b>1,280,000</b>	<b>134,000,000</b>

Recent events have operated to transfer Sind, the Punjab, Sattara, and the greater portion of the Lahore territories, from the list of independent states to those standing immediately under the dominion of Britain; and to enlarge the total area of British India by some 100,000 sq. m.; to which must be added, the acquisitions made in India beyond the Ganges, in 1824 and 1825, viz.:

	Sq. m.	Pop.
Countries south of Rangun, consisting of half the prov. of Martaban, and the provs. of Tavoy, Ye, Tenasserim, and the Mergui isles.	21,000	51,000
The prov. of Arracan.	11,900	100,000
Countries from which the Burmese have been expelled, consisting of Assam and the adjacent petty states.	45,000	150,000
<b>Total.</b>	<b>77,000</b>	<b>301,000</b>

The present political distribution of this magnificent region, over which England holds imperial sway, is sketched in another paragraph of this article.

[*Progressive geography.*] The first notice of India is given by Herodotus. Prior to the invasion of that country by Darius Hystaspes, the Persian monarch sent Scylax of Caryanda to trace the course of the Indus, and ascertain the place where it discharged itself into the sea; and it was from his account that Herodotus was supplied with his knowledge of India, which evidently does not extend beyond the sandy tract which lies E. of the Indus and S. of the Punjab.—The conquests of Alexander supply us with the next step in the progressive geography of this country. He is generally supposed to have crossed the Indus at Attock; but Major Wilford is of opinion that he crossed at the ferry of Torbelam, a few miles to the S. of Attock. From the E. side of the Indus, he advanced to the *Acacines* or Chenab, which he crossed, and also the *Hydraotes* or Ravi. After this he deviated from the direct road leading to the Ganges, and advanced by a SW route to Sangala; where he turned again to the E., and reached the *Hyphasis* or Beas. This was the limit of his march; consequently the information which Arrian and other historians afford respecting India, derived from his victories, does not extend beyond this tract of country,—that is about 200 m. across the Punjab,—and the countries which, on his return, Alexander traversed from Multan to the sea.

Our first knowledge of the Ganges is derived from Megasthenes, who was sent ambassador by Seleucus to Chandragupta or Sandracottus king of the Prasii. The cap. of his kingdom was Palibothra, generally supposed to be Patna, on the S. side of the Ganges, in N lat. 25° 37', and E long. 85° 15'. In this city Megasthenes resided three years; and as he kept a journal of what he saw and heard regarding India during his residence, it may be supposed that his information added much to the knowledge which the ancients possessed of India.—Diodorus Siculus, Strabo, Arrian, and Pliny seem to have derived all the accounts which they gave of India from Megasthenes. All these authors lay down the proportional dimensions of this country with tolerable accuracy. According to Diodorus, the breadth is seven-eighths of the length. Arrian's geography of India is principally confined to the N parts which had been visited by Alexander and Megasthenes. He gives a tolerably accurate account of most of the rivers which flow into the Indus and Ganges; and the extent of India, which he derived from Megasthenes, is as near the truth, according to Rennel, as that which we assigned it 90 years ago. Pliny was evidently acquainted with the form of the peninsula, from the measures which he gives along the coasts between the mouths of the Ganges and the Indus.

One of the most important ancient records of this country is to be found in the map and description of Ptolemy. In some respects this author is very minute and accurate; but in others he is grossly erroneous. Though he lived 60 years after Pliny, he describes the peninsula of India as stretching from the gulf of Cambay from E to W, instead of from N to S. This is the more extraordinary, not only because he had access to the comparatively accurate information respecting India recorded by Strabo, Diodorus Siculus, and Pliny, but because he himself traces with great minuteness the sea-coast,—specifies the most remarkable places on it, and assigns the lat. and long. of each, from Cape Comorin to the mouth of the Ganges. Hence it would appear that his general account of the form of India was expressly contradicted by his detailed description of the country. To Ptolemy also we are indebted for the enumeration and relative position of the different mouths of the Ganges; and for a curious delineation of various roads used by the traders to China, across the N. of India. The geography of this part of H. is also greatly illustrated by the description given by Pliny, Dionysius Periegetes, Ptolemy, and the Peutingerian tables, of the famous royal or Nyssean road. This was made with great care; and at the end of every Indian Itinerary measure a small column was erected. The first part of it corresponds with the route pursued by Alexander from the Indus to the Hyphasis; the remainder led to Palibothra. Its whole length was nearly 1,500 m. This road has been illustrated with considerable learning, but not always with the soundest judgment, by Major Wilford.

After the age of Ptolemy, we derive no additional or more accurate information regarding India till the 6th cent. after Christ. At this period Cosmas, an Egyptian merchant, made some voyages to India. From his work it appears that he was well acquainted with the W coast of the peninsula, which he particularly mentions as celebrated for its trade in pepper.—After this time, till the discovery of the Cape of Good Hope, the geography of India is almost entirely illustrated by the Arabian writers, particularly by two Mahomedan travellers in the 9th cent., whose travels have been published by Renodot; by Mas-



soneti, and by another Arabian author, who wrote about the middle of the 14th cent. The Mahomedan travellers mention a great empire on the Malabar coast; their relation in this and other respects is confirmed by Massoudi, who published his account of India in the 10th cent. This last author describes India as divided into four kingdoms. The first comprised the provs. on the Indus and its tributary streams, of which Multan was the capital. Of the second, which seems to have lain on the banks of the Ganges, Kanoge was the cap. This kingdom and its cap. are much celebrated in the most remote times of ancient Hindu history. The third kingdom was Cashmere; the fourth, Gujerat. It is evident that the information respecting India possessed by Massoudi, and probably by his countrymen in general, was confined to H. Proper. The Arabian author who wrote about the middle of the 14th cent. divides India into the northern part, comprehending all the provs. on the Indus; the middle, which stretched across from Gujerat to the Ganges; and the southern, which he calls Comar, probably from Cape Comorin.—About the middle of the 13th cent., Marco Polo visited different parts of Hindostan. He is the first author who mentions Bengal and Surat by their present names as rich and powerful kingdoms.

The next illustration of the geography of H. is derived from the Ayin Achari, a work executed under the reign of the emperor Akbar. This sovereign divided H. Proper into eleven *subahs* or provinces, which were again divided into *circars*. Cabul and the countries W of the Indus constituted a 12th *subah*; and the conquests in the Deccan afterwards were divided into 3 more. The details given in the Ayin Achari of the extent, boundaries, divisions, productions, military force, &c., of these provs. is surprisingly minute, and apparently the result of much attentive and laborious investigation and inquiries.

The conquests and settlements of the Portuguese in India were almost entirely confined to the coast, and did not much increase the geographical knowledge possessed by Europeans respecting this country. Indeed till the conquests of the English, during the middle and latter end of the 18th cent., little was accurately known respecting the interior of H. In 1788, Major Rennell published the first edition of his *Memoir of a Map of Hindostan*. In this work, with wonderful research and information,—though not always with the most perspicuous or satisfactory arrangement,—he has thrown great light on the geography of this country; and except with regard to those districts which at that time had been little if at all explored by the English, he left scarcely any point uninvestigated. In the subsequent editions of his memoir, as well as in the *Oriental Repertory* of Dalrymple, the *Asiatic Researches*, the valuable *Travels* of Dr. Francis Buchanan, *Malcolm's Memoir on Central India*, *Todd's Annals of Rajasthan*, the *Travels* of Burnes, Masson, Hugel, Wood, Vigne, and others, the *Erkünde von Asien* of Ritter, the *Transactions* of different Indian literary and scientific societies, the results of Parliamentary inquiries, and a variety of other sources,—the geography of H. has received such ample and minute investigation as to leave few parts of this extensive country altogether unexamined and reported upon.

*General Physical features.*] Two sides of the irregular four-sided figure which this great and diversified region forms are washed by the sea; the other two are bounded by land. The bay of Bengal, which washes the SE shore, is not so broad as the Arabian sea which laves the SW side; but the countries on the latter sea, especially towards the N, are more arid and sterile than those which lie along the former. The land-boundary on the NW toward the sea is flat and desert; as it recedes inland, the elevation increases and the scenery improves. The remaining or NE side, from the termination of the low and swampy grounds near the bay of Bengal, is formed by mountains of prodigious elevation. From this vast chain the two great rivers of India have their sources, and flow to opposite points of the continent. The countries on the Indus,—the central desert, as it is called,—and the valley of the Ganges,—comprise the whole of India N of a line drawn from the gulf of Cutch, eastward of the mouth of the Indus, to the mouth of the Ganges. All the features of this continental portion of India are on the most magnificent scale; those of the southern or peninsular part are less bold, and partake more of the nature of an island. From the mouth of the Ganges to that of the Kristna, in about N lat. 16°, the E coast lies nearly in a straight line NE and SW, and the general outline of the country is that of a great oval basin, of which the S portion approaches near to the Arabian sea, but is divided from it by high land. From the mouth of the Kristna, a very irregular mountain barrier, called the Eastern Ghauts, extends south-

ward at varying distance from the coast, which is here for the most part sandy and barren. The elevated country within this mountain-barrier gets the name of *Balaghaut*, or the country 'above the gates,' in opposition to the *Payinghaut*, or country 'below the gates.' The name of Balaghaut is given to the whole upland country from Cape Comorin to the Ganges.—From Cape Comorin another mountain-barrier runs parallel to the western shore for an extent of about 900 m. This range, nearer to the coast, loftier, and less interrupted than the other, is called the Western Ghauts. The termination towards the N is near the gulf of Cambay; and here, for a short distance, the general slope of the country is towards the W, where the valley of the Nerbudda is formed.—Under the 13th parallel, the Eastern and Western Ghauts are connected by a cross ridge, and the country does not immediately slope down to the N and S of this transverse ridge, but forms a table-land of considerable extent. N of the gulf of Cambay, the peninsula of Gujerat, beautifully diversified with hill and dale, extends towards the gulf of Cutch. To the N of the latter gulf, and extending northwards to the great central desert, there is a dreary marsh called the Runn, measuring about 250 by 70 m. If we enter H. at the NW corner, in Lahore, the face of the country is hilly, till we reach the S extremity of this prov., where the Panjab commences. Passing thence to Multan, we again meet with hills in the N extremity of that prov. The face of the country in Ajmir is nearly the same; but when we pass SW into Guzerat, it becomes very flat; on the contrary, if we pass S or SE into Malwah, we enter a very elevated region,—one of the most elevated, indeed, in H., as great rivers flow from it in every direction. If from Lahore we enter Delhi, we find the face of the country very flat; indeed, Delhi, Oude, and Bengal, are the most flat provs. in H. The surface of Orissa, N of the river Chumbul, is likewise flat; but to the S of that river, as well as on the NW, it is hilly. Proceeding S, the first lofty land we meet with in H. Proper is in the Bundelcund district of the prov. of Allahabad, in the SW. The S part of Bahar is also hilly, while the N division of this prov., beyond the Ganges, partakes of the flat character of Bengal and Oude. On the E side of the Deccan, before we arrive at the Ghauts, there is a mountainous ridge, extending from the Godaveri to the Mahanada. Proceeding across the country in a direction nearly due W from this ridge, we enter Berar, the surface of which is for the most part elevated and hilly; the same character applies to the provs. of Gundwana, Candeish, Hyderabad, Orissa, and the Northern Circars. The S of India consists of table-land, or rather an elevated surface considerably broken in the centre, and remarkable for numerous isolated precipitous rocks, the natural strength of which has been greatly augmented by the erection of fortresses on them. The Ghauts lie on the E and W of this table-land; and a flat country extends between both chains of the Ghauts and the sea. In Malabar, however, there is a chain of low hills, separated from one another and from the Ghauts by narrow valleys. In some places these hills rise to the coast; but in other parts there is between them and the sea a flat tract, seldom above 3 m. wide, and in general not so much. Near the low hills these plains are the most level.

*Mountains.*] On the north, H., in the largest acceptation of the word, is bounded by the Himalaya mountains, a chain superior in elevation to any other yet known. See HIMALAYA. Branches spread from them to the S as far as the borders of Bengal, Oude, and Delhi. The last prov. is also separated from Northern H. by the Sivalic or Kemaun mountains.—

The Vindhya mountains, among which lies the Arcadia of India, pass through Bahar, Benares, Allahabad, and Malwah, along the N side of the Nerbudda, nearly to the W coast. To the S of these is a less elevated chain called the Tahya hills.—The chain of hills commonly described under the appellation of the Eastern Ghauts, commences in the S; about N. lat.  $11^{\circ} 20'$ , to the N of the Cavery, and extends, with little interruption or comparative deviation from a straight line, to the banks of the Kristna, in N. lat.  $16^{\circ}$ , separating the two Carnatics,—the one named the Carnatic Balaghaut (the true Carnatic); the other the Carnatic Payinghaut, extending along the coast of Coromandel. The exact height of this ridge along its whole course has not been ascertained, which is rather extraordinary; but its general elevation is known to be considerably less than that of the Western Ghauts. About the lat. of Madras, which is the highest part, it is estimated at 3,000 ft.; and the table-land of Bangalore, towards Uscottah, which is within the chain, is more than 3,000 ft. above the level of the sea. The circumstance that the rivers which have their sources in the upper table-land universally flow towards the E, proves the superior elevation of the Western Ghauts, and they are by far the most abrupt in their ascent. The geology of these mountains is very imperfectly known; but the chief rock is said to be a granite, consisting of feldspar and quartz, with dark green mica in a small proportion to the other two ingredients. The rocks appear stratified, but the strata are very much broken and confused.—The chain of the Western Ghauts is better defined than the other, as it extends from Cape Comorin to the Tupti or Surat river; where, however, it does not terminate in a point or promontory, but departing from its meridional course, bends eastward in a wavy line parallel to that river, and is afterwards lost among the hills in the neighbourhood of Burhanpur. In its line along the Tupti this ridge forms several *ghauts* or passes, from which there is a descent into the low land of Candeish. In their whole extent the Western Ghauts include  $13^{\circ}$  of lat., with the exception of a break in the ridge about 16 m. wide, in the lat. of Paniani, through which the river Paniani flows to the Western ocean. Their distance from the sea-coast is seldom more than 70 m., commonly about 40 m.; and they are frequently visible from the sea, to which, between Bangalore and Mirjaoa, they approach within 6 m. The Western Ghauts are in general from 2,000 to 3,000 ft. higher than the Eastern Ghauts; several are from 5,000 to 6,000 ft. above the level of the sea. The peak of Mount Subramani, on the frontiers of Coorg, has been estimated at 5,611 ft.—The Neilgherries, or 'Blue mountains,' were scarcely known to the British public before 1819, when some account of them appeared for the first time in the Indian journals. These mountains are situated to the NW of Coimbatour, about  $11^{\circ}$  from the equator. They extend nearly 40 m. in length, by 15 or 20 m. in breadth, and form a connecting link between the Eastern and Western Ghauts. The following are the barometrical heights of some stations above the level of the sea: Jackanairy, 5,659 ft.; Jactally, 5,976 ft.; Dimhutti, 6,041 ft.; Oota-Kamund, 6,416 ft.; and Murchurti-Bet, 8,800 ft. In equality and salubrity of temp. this region surpasses any other of the Indian continent. The average range of the therm. is about  $30^{\circ}$  below that on the adjacent coasts of Malabar or Coromandel. The maximum heat in the shade, at noon, during 14 months, was  $68^{\circ}$ ; and the average for the year  $56\frac{1}{2}^{\circ}$ ; whilst the extreme variation was only  $12^{\circ}$ .

*Plains.* From the general description which has been given of the surface of the country, it will na-

turally be expected that the most numerous and extensive plains must be sought for in H. Proper. Indeed, the whole country through which the Ganges flows, from the Sivalic mountains to the sea, is one vast plain. There is also a plain stretching from Sirhind to the city of Delhi, in a NNW direction, a distance of 155 m. This plain contains the towns of Paniput and Carnal; and is celebrated as having been the scene of two great battles, one in 1525, between the Emperor Babar and the Patan Sultan Lodi; and the other in 1761, between the Mahrattas and the Mahomedan army commanded by Abdalli. Across the E entrance of the pass of Paniani, already described, there is an elevated plain, 60 m. in extent, which rises suddenly from the level of the surrounding country, resembling an extensive terrace. There are similar elevated plains in Bengal, and in the Bundela country S of the Ganges, near the Suhagi Ghaut. From the summit of the minaret in front of the mausoleum of Achar, at Secundra, 6 m. to the N of Agra, an extensive plain stretches 30 m. in a direct line, filled with the ruins of ancient grandeur.—Of the Sandy desert mentioned by Herodotus, our knowledge is but imperfect. Cutch lies to the S of it; Gujerat to the E; Sind to the W. According to Rennell, it extends from the sea to the Punjab country. In this extent, however, he probably comprehends the Runn, a large salt morass which bounds the W frontiers of the prov. of Gujerat, and communicates with the gulf of Cutch, and which in some places seems to adjoin and in other places to be intermixed with the Sandy desert. The latter is about 550 m. in length, and about 160 m. in the widest part. In some parts of it there are spots of clay mixed with the sand; but in general the surface is bare, desolate, and sterile, and the wells are frequently at the distance of 8 or 10 coss from one another. All over this sandy tract are scattered isolated jungles, but of stunted growth. The Runn or salt morass in some places consists of water only a few inches deep; in others it is an impassable swamp; in others a bank of sterile and loose sand. It bends round the N of Cutch, and, including its windings, is supposed to extend several hundred miles.

*Rivers.* The glory of H., it has been remarked, consists in its noble rivers; in this respect it presents a remarkable contrast to Persia, the neighbouring kingdom on the W. The great rivers of India, too, have this peculiarity, that the greater part of them flow along very gentle declivities, and possess great depth of water, so that they may easily be rendered available for the purposes of internal communications; and, instead of tearing up and devastating the country, during the rainy season, as in Africa, they merely overflow it with a fertilizing influence. The only rivers of H. of a very lengthened course, or great volume of water, are those which run through H. Proper,—the Indus and the Ganges, with their respective tributary streams. The Indus enters H. about the lat. of  $33^{\circ} 15'$ . Here it is an inconsiderable stream, but its breadth and volume of waters is much increased by the junction of the Attock, flowing into it from the W. The Indus pursues its course through H. to the beginning of its Delta, about 170 m. from the sea, nearly in a straight line S by W. The whole course of this river, from its entrance into H., is about 900 m. It is navigable to Attock; but the tide does not flow up more than 60 or 65 m. At Tattah, about 130 m., by the course of the river from the sea, the Indus is very narrow; about 5 m. below this town the greatest depth is 4, and the common depth only 2 fath. The breadth here is about a mile. The land-floods, occasioned by the melting of the snow, begin about the middle of July, and do not subside till the end of

August. The tributary rivers of the Indus chiefly flow into it in the northern half of its course, in the prov. of Multan, forming the Punjab, or country of rivers. These rivers, the Jelum, the Chenab, the Ravi, the Beas, and the Sutlej, all rise nearly in the same place, at the foot of the Himalaya mountains. The Jelum, the *Hydaspes* of the Greeks, after crossing the great road leading from Lahore to Attock, and flowing along the E side of the Joud mountains in the province of Ajmir, unites with the Chenab, about 60 m. above Multan. Its whole course is about 450 m. It is the most westerly of the streams that flow through the Punjab into the Indus; and is navigable to Oin.—The Chenab, the *Acesines* of the Greeks, is nowhere after it enters the Punjab more than 35 m. from the Jelum. About 28 m. above the city of Multan, about 50 m. below its junction with the Jelum, it receives the Ravi; and 60 m. below this point enters the Indus. The length of its course is about 650 m. It is navigable to Aknur.—The Ravi enters the plains of Lahore near Shahpur; its course is SW till it passes the city of Lahore, above which it is 120 yards broad, and very rapid. Its whole course is about 450 m.—The course of the Beas, for the first 200 m., is directly S; it afterwards flows to the W. It unites with the Sutlej about 300 m. from the sea. This junction, however, formerly took place much lower. The whole length of its course is about 220 m.—The Sutlej, the most eastern of the rivers of the Punjab, enters H. at Bellepur in the prov. of Delhi. Before it is joined by the Beas, it is a very considerable stream; after their junction at Hureki, they lose their respective appellations, and take the name of Ghara, the *Hyphasis* of the Greeks. It is navigable to Ropur. Its whole course is about 860 m.—These five rivers of the Punjab increase the breadth and depth of the Indus so much, that there is water sufficient for flat-bottomed vessels of nearly 200 tons burden, from the gulf of Cutch to Lahore, a distance of 760 geog. m. See INDUS and PUNJAB.

The Ganges rises on the S side of the Himalaya mountains, and enters the plains of H. at Hurdwar, in the prov. of Delhi, in N lat. 29° 57', E long. 78° 2'. Its course is nearly straight till it passes Allahabad, when it becomes more winding, and its bed deeper and broader. After receiving the tributary streams of Bengal and Bahar, some of which are equal in volume to the Rhine, its channel attains its full breadth, which is commonly about  $\frac{3}{4}$  m. when the river is at its lowest. Its depth, at this time, is 30 ft. for an extent of 500 m., before it reaches the sea. Of the different branches into which this river is divided before it enters the gulf of Bengal, the westernmost, called the Hugli, and the most eastern, which receives the Brahmaputra, are the widest and most important. The whole navigable course of the Ganges is about 1,500 m. For a fuller account of this river, see the article GANGES.—The first large river that joins the Ganges after it enters H. Proper, is the Jumnah. Its source is farther to the NW than that of the Ganges. A little before it enters H., in the prov. of Delhi, the two rivers are only 40 m. distant from each other. After its entrance into H., its course is nearly parallel with that of the Ganges, at the distance of from 50 to 75 m. These rivers unite at Allahabad. Its whole course is about 780 m., on the W side of the Ganges.—Nearly 10 m. below Etawah, in the prov. of Agra, the Jumnah is joined by the Chumbul, which rises near the source of the Nerbudda in the prov. of Malwah. Its course is NE: its whole length is 440 m. It long constituted the boundary between the British possessions in H. Proper on the S. and those of Scindiah.—The largest rivers that flow into the Ganges

from Bengal and Bahar are the Gôggra, the Soane, and the Cosa. The first is composed of the waters of the Goggra and the Saregu, which unite at Swargadwara. They afterwards flow through the prov. of Oude, and unite with the Ganges in Bahar. The course of the Goggra is nearly parallel to that of the Ganges on the E side.—The Soane rises near the Nerbudda, on the E side of the table-land of Amercupatue. Its direction is at first due N; it afterwards turns NE, and joins the Ganges in the prov. of Bahar. Its whole course is about 500 m.—The course of the Cosa, which rises in the Himalaya mountains, is at first SSE; it afterwards winds much. Its junction with the Ganges takes place 45 m. above Rajemal, in the district of Purneah, in the prov. of Bengal. Its course is about 400 m. The Brahmaputra, which afterwards forms the great E branch of the Ganges, is supposed to rise very near that river. Its course for a considerable way is E, and at one place it reaches within 220 m. of the most western prov. of China. It then very abruptly turns W, through Assam,—a country remarkable for the number and magnitude of its rivers, most of which flow into the Brahmaputra. It enters Bengal near Ranjamatti. Its course is now W, and afterwards S, in the Deccan district, where it is joined by the Megna. The Ganges and the Brahmaputra unite below Luckipur. The whole course of this river, as far as it is known, is about 1,650 m. It flows 400 m. through Bengal. Though the Ganges and it rise near each other, yet at one part of their course they are 1,200 m. distant.

The rivers in the Deccan, or central division of H., are the Nerbudda and the Tupti on the W, and the Subunreka, the Mahanadda, and the Godaveri on the E.—The Nerbudda's course has been already noticed; but while the Soane flows to the NW, the Nerbudda takes nearly an opposite course, flowing almost due W. It has fewer windings than most Indian rivers. After passing through part of the provinces of Gundwana, Candeish, Malwah, and Guzerat, it joins the sea 25 m. below Baroach. Its whole course is about 750 m.—The Tupti, or Surat river, rises in the mountains which bound the prov. of Berar on the N. Its direction is W, through Candeish and Guzerat; and, after a course of about 400 m., it falls into the sea about 20 m. below Surat.—Subunreka rises in the southern extremity of the prov. of Bahar. Its course is to the SE for 250 m., when it falls into the bay of Bengal, about 30 m. to the W of the Hughli mouth of the Ganges. This river is by some considered as the NE boundary of H. Proper.—The Mahanadda rises in the hilly country of Gundwana. Its course is very winding. In the district of Cuttack, in the prov. of Orissa, it receives several streams. It directs its course to the bay of Coojung, where it falls into the gulf of Bengal. Its whole course is 550 m.—The Godaveri rises in the Western Ghats at Trembuch-Nassor, about 70 m. to the NE of Bombay. Its course is at first due E, through Arungabad and Telligana; it afterwards turns SE. At Rajamundri, in the Northern Circars, it divides into several branches, which form a fertile delta, and several harbours for small vessels. Its whole course is about 850 m. About 90 m. from its mouth it is joined by the Bainjunga.

To the south of the Tupti the course of all the rivers is to the E, in consequence of the superior elevation of the Western Ghats. The few rivulets that flow into the western sea descend so abruptly from the mountains that they have not time to collect into streams of any magnitude. Those on the E side are mostly choked with sand-banks thrown up by the violent surf across their mouths. Some of these, however, require notice. The Kristna rises



in the Western Ghats, not more than 50 m. from the W coast of India. Its direction is to the SW till it reaches Mersetch, in the province of Bejapur. Here it is joined by a number of streams from the Ghauts, united under the common name of Warnah. Its course is now more to the E, where its volume is again increased by several rivers, the principal of which are the Malpurba and Tumbuddra. It forms a delta near Masulipatam, after a course of nearly 650 m. It equals, if it does not surpass, any other Indian river, in the fertility which it creates during its course; watering, and of course fertilizing, the provinces of Bejapur, Beder, Hyderabad, &c.—To the south of the Kristna, is the Pennar, the Palar, and the Caveri. The Panar is said to spring among the hills of Nundydrug in the Mysore. Its course is northerly till it reaches Gutti, in the Balaghaut ceded districts, when it changes to the SE, and afterwards to the E. It falls into the sea at Gungapatnam in the Carnatic, 108 m. to the N of Madras.—The Palar also springs from the hills of Nundydrug, but its course is to the S. After flowing for 220 m. through the Mysore and Carnatic, it falls into the sea at Sadras.—The Caveri has its source in the Kurg country, a district among the Western Ghats, but it is of no magnitude till it quits it. Near Seringapatam it forms an island; and opposite to Trichinopoly in the Carnatic, it again separates into two branches which surround the island of Seringham. The northern branch is named the Colorun, the southern retains the name of Caveri. About 13 m. farther to the E, these branches approach each other; and an immense mound is formed in order to prevent the Caveri from falling into the Colorun, the bed of which is 20 ft. lower.—The Colorun falls into the sea near Negapatam, and the Caveri at Tanjore. These rivers form a wider delta than any other river in this part of India. Their whole course is about 300 m.

*Lakes.* There are but few lakes in H. The Chilka lake divides the northern Circars from the Cuttack district of Orissa. It is about 35 m. long, and 8 m. broad. Towards the E and S, it is bounded by a narrow sand, very plain and flat, and about 1 m. in breadth; and on the NW by a chain of mountains. Its water is salt, as it has a communication with the sea by a very narrow and deep outlet; and, indeed, evidently has been formed by the sea breaking over the flat sandy shore. This lake receives one of the branches of the Mahanada. It contains several islands, which are inhabited.—Between the Kristna and Godaveri, in the lower part of their course, there is an extensive tract of flat and rich country, evidently alluvial, and formed by these rivers, about 150 m. in length along the coast, and from 40 to 50 m. wide. About half-way between the two rivers, a hollow of considerable extent occurs in this alluvial soil, in the lowest parts of which there is a lake at all seasons. The whole extent of this hollow ground is 47 m. from W to E, and 14 m. from N to S. During the rainy season, the whole is covered with water, except 60 or 70 small eminences, on which the inhabitants take refuge. This is the Colair lake. Between it and the Godaveri and the Kristna, there are traces of a channel which has been formed either to drain the lake, or to irrigate the adjacent lands. The latter purpose has indeed been effected by various other channels.—The lake of Pulicat, on the coast of the Carnatic, is about 33 m. from N to S, and 14 m. across in its broadest parts. Its water is salt, as it communicates with the sea by several narrow channels; and it evidently owes its origin to the same cause which produced the Chilka lakes. There are several large islands in it.—The lake of Onore, in North Canara, reaches nearly to

the Ghauts. It is almost salt during the dry season, but when the rains bring down the torrents from the mountains its waters become fresh.—In the N parts of Hindostan there are few lakes, especially in the vicinity of the Ganges and the Indus. There are two lakes close under the walls of Ajmeer; the most northern is 6 m. in circumf., and very deep.

*Canals.* The greater part of H. Proper is so much intersected by navigable rivers that canals seem scarcely necessary; while, in the Deccan, and the south of India, the surface is in general so very uneven that they are almost impracticable. Nevertheless this mode of internal communication was formerly not neglected in H. Proper, though the canals were rather intended for the purpose of irrigation than that of conveying goods. The most celebrated were those partly executed in the reign of Feroz II. It is doubtful whether they were ever completed; if they were, they would have united the Indus and the Ganges; for one of them was drawn from the Jumna, near the northern hills, to the city of Hissar; and the object of the other was to form a water-communication between the Sutlej and the same town. The first canal, which seems to have been completed, was 114 geog. m. in length. It was repaired and first used to Delhi, in 1626, by Shah-Jehan; thus making its whole length 185 geog. m. There is no precise or clear information respecting the part of the Sutlej from which the other canal was drawn. It is said to have been 100 m. long. Besides these main canals, there were several branches which united them in different parts, and in different directions. The design of Feroz was to fertilize a vast tract of land naturally very dry and sterile, and also to facilitate and increase inland navigation. In 1817-20, the British government cleansed and repaired the canal from the hills at Rair to Delhi, which, during the convulsions of the Mogul empire, had been almost wholly choked up; and in 1823-9, the canal of Feroz-Shah with its branches, was cleansed and restored.—From Shah-pur, where the Ravi enters the plains, a canal was drawn from that river to Lahore, about 80 m. in length; the object was to supply the city with water during the dry season. For the same purpose three other canals were drawn from the Ravi, near Shah-pur, to the S and E of Lahore. Between the years 1823 and 1830 these canals of the Dohb, having a total length of 160 m., were restored.—In 1803, a canal was made from the Black-town of Madras to the river Ennore. Its length is 10,560 yds.; its greatest breadth at the top 40 ft.; greatest depth 12 ft. By means of this canal, boats convey charcoal and fire-wood, the produce of the high land behind Pulicat, to Madras. The rivers of Tripalio-lore and the Panar, which approach within about 1,800 yds. of each other, near Fort St. David, are joined by a canal, which runs nearly parallel to the sea, at the distance of about 1,000 yds.

*Coasts.* The eastern and western coasts of India differ in a very striking manner. The Malabar, or W coast, is high and bold, and possesses a few excellent small harbours, formed by insulated rocks and promontories. The Coromandel, or E coast, is low, sandy, and full of shoals and banks, without a port of any kind; the entrance to its small rivers being blocked up by the sand thrown in by the dangerous surf, which beats against it at all seasons.—Cape Monze, in the lat. of 24° 55' N, and in the long. of 65° 46' E, is considered as the commencement of the coast of H. on the W. The bay of Kurrachi, between this cape and the Indus, admits vessels of 300 or 400 tons during the rainy season. The tide rises here 12 ft. From Cape Monze to the gulf of Cutch, is called the coast of Sind. The gulf of Cutch runs far inland towards the E. Its upper part is full of shoals, and is bounded by a low narrow plain always overflowed during the rainy season.—On the S shore of this gulf, the coast of Guzerat begins. Between it and the gulf of Cambay the coast is rather high. The gulf of Cambay, bounded by the coast of Guzerat on the W, and by that of Surat on the E, runs nearly 150 m. inland. Near Cambay, the upper part of the gulf, the tides run nearly at the rate of 6 m. an hour; at high water rise 40 ft.; and at low water leave the gulf dry for 7 leagues below the town. At 15 m. to the E of this town the breadth of the gulf is only 6 m. It is here also completely dry at ebb tide; but the bottom is covered with mud and quicksands, so as to render a passage across without a guide extremely dangerous. In the gulfs of Cutch and Cambay, the bore, or rush of the tide, is nearly as rapid as that at the mouth of the Indus and Ganges. As we approach further to the S, the coast becomes more level. The first sea-port that occurs is Surat, on the l. bank of the Tupli, about 6 leagues from the sea. This river, however, is so shallow at the town, that large vessels are obliged to anchor at its mouth. The coast between Surat and Cape St. John continues so very low, that, during the prevalence of the SW monsoon, and high tides, it is inundated.—From this cape to Bombay, a reef, lying 3 leagues off, stretches along. Bassein, a port in the prov. of Aurangabad, lies on a narrow strait which separates it from the island of Salsette. Across the mouth of this there is a bar of sand, so that only small vessels can enter. Salsette, 18 m. long, and 14 m. broad, was formerly divided from Bombay by a strait 6 m. long, and about 200 yds. across, which was occasionally fordable; but these islands are now united by a causeway. Bombay, with Salsette, Caranga, and Elephanta, forms a most commodious harbour. The tides rise higher here than in any harbour possessed by the English in their Indian settlements. The usual height is 14 ft., but they sometimes rise to 17 ft.—We now enter on the coast of Concan.

on which the first object of importance is a rocky promontory, joined to the continent by a narrow neck of sand, about 1 m. long, and  $\frac{1}{2}$  m. broad, on which stands Gheriah, formerly the cap. of the celebrated pirate Angria. A river of some magnitude runs from the Ghauts into the sea, on the N of this promontory. About 30 m. to the S of Gheriah lies Melunday, or Malwan island. To the S of it, 4 leagues off the coast of Belapur, lie a cluster of rocks called the Vingoria, or burnt rocks. On the E bank of a navigable river, and about 7 m. from the sea, stands the town of Goa. Here a fine bay, bounded on the S by the peninsula of Marmagao, presents itself. From Goa to Cape Ramas the coast is low, with a beach of sand. There are few coasts so much broken into small bays and harbours, and at the same time retaining so straight a general outline, as the coast between Bombay and Goa, a distance of nearly 220 geog. m.

After passing Cape Ramas, the coast of Canara begins. At Fort Carwar there is an inlet of the sea, with a wide and deep but intricate channel. To the S of this is the island of Anjediva, about 2 m. from the shore, in front of a bay, formed by two promontories so lofty that they afford some shelter to ships even during the SW monsoon. Mirjahur, a river which, in the month of February, 7 m. from the sea, is 700 yds. across, affords the most convenient wooding and watering-place on the coast of Malabar.—The lagoon of Onore, already described, succeeds in N lat.  $14^{\circ}18'$ . Mangalore, in S. Canara, in lat.  $12^{\circ}49'$ , is situated on a peninsula, which stretches into a large salt lagoon separated from the sea by a sand beach. Across this beach there was formerly an opening capable of receiving large ships; but at present this channel has become so shallow as to admit only vessels drawing less than 10 ft. Nearly 25 m. E by S from Mangalore stands Cumly, on a high point of land between two rivers, which run into a salt-water lake divided from the sea by a narrow sand bank. In the rainy season both the rivers and the lake are fresh. From Cumly, for several leagues to the S, the coast is lined by a range of salt-water lakes, which, however, are of little use to navigation, in consequence of the sand-banks which lie between them and the sea.

The coast of Malabar begins at the river Chandragiri, in lat.  $12^{\circ}27'$ . This coast is much indented by inlets of the sea, and salt lagoons lying within a chain of sandy and narrow islands. These inlets run for great lengths parallel to the coast, and receive the small and rapid streams that descend from the Ghauts. They open to the sea by narrow and shallow channels. The first remarkable spot on the coast of Malabar is Mount Dilla, which is separated from the main land by salt-water creeks. The best bay on this part of the coast is formed by a point of land on which stands the fort that protects the entrance to the town of Cannore. The town itself is situated at the bottom of the bay. Tellicherry, in lat.  $11^{\circ}44'$ , succeeds; it stands on a small river. The coast here is very low and sandy. At Vadagherry, in lat.  $11^{\circ}35'$ , the series of salt lakes commence, which run without interruption to the S, forming a kind of inland navigation protected from the sea by a chain of sandy islands. Calicut is situated on a river, navigable by boats, 100 m. up the country. It is the port principally frequented by the Arabs of Muscat. Paniani, 40 m. SE from Calicut, is situated on the S side of a river which flows from Animalaya. The entrance of this river, though wide, is so obstructed by a bar, that only the trading-boats of the natives can reach the town. The salt lakes, islands, and small ports situated on them, now become numerous; but the first of consequence, to the S of Paniani, is Cochin, which is built on a very low island. The inlet to it is navigable for vessels of considerable burden. Cape Comorin, the S extremity of H., in N lat.  $8^{\circ}5'$ , and E long.  $77^{\circ}30'$ , is in itself low and level; but, about a  $\frac{1}{2}$  m. to the N of it is the mountain of Komari, the S termination of the Ghauts, the summit of which is said to be 1,294 yds. above the level of the sea. This is regarded by mariners as the cape.

The SE extremity of H. is occupied by the coast of Tinnevely. On it are no ports of any consequence. On some parts of it the tide rises only two or three feet. Between the island of Ceylon and Point Ramen is the island of Ramisseram, about 11 m. long and 6 m. broad. It is low and sandy. The strait between it and the main land is about 1 m. wide; but so obstructed by rocks, and with an entrance from the N so very narrow, that it cannot be navigated except by very small vessels. From Point Calymere to the river Caveri is the coast of Tanjore, which is so extremely low and flat that the first objects seen in approaching it are the tops of the cocoa palms.—Negapatam, 48 m. to the E of the town of Tanjore, in lat.  $10^{\circ}45'$ , is situated on a small creek. Only coasting vessels, or ships for refreshments, frequent it.—Tranquebar, in lat.  $11^{\circ}$ , is situated on a small river, across the mouth of which is a bar. The best roadstead on this part of the coast is off the town of Portonovo, in lat.  $11^{\circ}30'$ . It is sheltered on the S by a shoal.—Pondicherry, on the river Gingie, is a port of little consequence with respect to trade, as the river can only receive small vessels even during the rainy season. Its roadstead, however, is not so dangerous as that of Madras; and landing may occasionally be accomplished in ships' boats. To the N of Madras, and about 38 m. S by W from Madras, the coast seems to have been encroached upon by the sea to a considerable extent. According to the traditions of the Bramins, a large city, called Mahabalipuram, or 'the city of the Great Ball,' stood here in very remote times; and the surf is said still to break over its ruins.—Madras, in N lat.  $13^{\circ}5'$ , E long.  $80^{\circ}25'$ , lies on a coast where a rapid current runs, and on which a dreadful surf breaks, even when the weather is calm. The shore here is perfectly straight. Hence the roadstead of Madras is the worst in India;

the most dangerous season to remain in it is from the beginning of October to the end of December. Large ships generally anchor about 2 m. from the shore. When the surface is unusually high, catamarans are used to convey passengers from the Manilla boats. In lat.  $15^{\circ}30'$  the coast of the Carnatic terminates, and that of the Northern Circars begins. After passing Masulipatam, on a branch of the Krishna, and some other plains of less importance, we arrive at the bay of Coringa, in lat.  $16^{\circ}49'$ . Into this bay one of the branches of the Godavari falls. A bar of mud lies across its entrance, through which ships must be forced. This is the only place on the E coast of Hindostan where there is smooth water during the SW monsoon, so that a ship of above 200 tons can be thoroughly refitted here by being hove down.—A little to the N of Coringa bay the low coast terminates, and a ridge of high mountains commences which lines the coast to Ganjam in lat.  $19^{\circ}23'$ . There is nothing remarkable as we proceed N, till we arrive at Point Palmyras, which forms the entrance into the bay of Balasore on the S. A reef extends nearly 10 m. to the ENE of this point. There is little depth of water in the bay of Balasore. In some places the water leaves the shore for half-a-mile at low tide; and even at the distance of 3 leagues there is not more than 7 or 8 faths water. This arises from the immense quantity of mud and sand carried out by the Ganges. The shores of the bay are intersected by several small streams, some of which are navigable. The town of Balasore stands on the Buri Bellan river, in which the tide commonly rises 8 ft. At high-water vessels of 100 tons burden can cross the bar.

The coast of Bengal commences at the town of Piley on the Subanrika river, about 22 m. NE from Balasore, in lat.  $21^{\circ}42'$ . This was formerly a port of considerable trade, but it is now little frequented, in consequence of the flood having formed a dangerous bar across the mouth of the river, as well as washed away a great part of the town itself. Across the entrance of the Hugli, or W branch of the Ganges, there are several sounds, which render the navigation difficult and dangerous, particularly two called the E and W sea-reefs. The whole of the coast from the W to the E mouth of the Ganges consists of low islands, divided from one another by inferior branches of the river, and intersected in almost every direction by creeks.—The coast of Chittagong, a district lying at the SE extremity of the prov. of Bengal, is divided from that prov. by the E mouth of the Ganges; and from Aracan by the river Naup. On this coast there is one good port, Islamabad, about  $2\frac{1}{2}$  leagues off the river Chittagong. Ships of considerable tonnage are built here.—To the S of the river on which Islamabad stands there is an island called Kuttubdea, separated from the continent by a strait in no place more than 3 m. broad; and to the S of Kuttubdea is Mascate island, which is larger and of greater elevation.—The coast which we have described, from Cape Comorin to Chittagong, forms the W side and the bottom of the bay of Bengal. The depth of water on the W side is very great, at a comparatively short distance from the shore, there being no soundings about 30 m. off. At the bottom of the bay, however, the sea is shallow.

*Climate.* The climate of India is much affected by the three great modifying causes of position in latitude,—the nature of the surrounding region,—and the form of the surface. It has been said of India that it has only two seasons,—the dry and the rainy,—produced by the SW and NW monsoons; but the truth is, it is Southern and Peninsular India only that is governed by the monsoons.

*Monsoons.* In treating of the climate of India, the monsoons first claim our attention. It is generally said that the monsoons do not extend beyond the tropics; this, however, is not accurately the fact. At present, however, we shall regard them as blowing on the coast of India, from Cape Comorin to the tropic, and point out their effects on the climate of this region. On the Malabar coast the SW monsoon commences about the middle of April, and continues till August or September. It begins to blow first on the S parts of this coast, and gradually advances to the N. In September it has generally lost its violence; and for the next six weeks there are light variable winds. At the latter end of October the NE monsoon begins on this coast. It also blows first in the S, and about 15 days afterwards is felt on the N parts of the coast: this monsoon continues till April. On the Coromandel coast the SW monsoon begins about the end of March or early in April; but it is not regular or strong till the month of June, land and sea breezes being not uncommon in March, April, and May. In June, July, and August, this monsoon is very steady, regular, and strong; but even during these months a land or W wind blows from the shores for 24 or 48 hours. In August and September the SW monsoon begins to lose its steadiness and violence; and the NE monsoon commences about the middle of October. From this period till the beginning of December it is very boisterous, and navigation is rendered extremely dangerous; but in December, January, and February it is steady well-settled weather. On both coasts the setting in of the monsoons is generally attended by violent hurricanes. Such is a short description of the monsoons as they appear on the W and E coasts of India; but before we proceed to point out their effects on the climate, it will be proper to advert to the circumstance of their extending beyond the tropics. This is decidedly the case at Tattah, which lies in N lat.  $24^{\circ}44'$ . The monsoon, however, does not reach Kuralchi in N lat.  $24^{\circ}51'$ . There are indeed at

this place, as well as along the coast of Mekran, from April to October. SW and W winds; but, as they often veer round to the N and NW, they cannot be regarded as monsoons, especially as they are seldom attended with squalls and rain,—the invariable marks of the SW monsoon on the coast of Malabar. The climate of that part of India—as far as respects rain—in which the monsoons prevail, and the Ghauts are situated, is remarkably regular. It will easily be conceived, that when the SW monsoon prevails on the coast of Malabar this coast will be deluged with rain, in consequence of the Western Ghauts intercepting the clouds brought by this monsoon; and that the same monsoon, on the Coromandel coast, will occasion dry weather; while, on the latter coast, the rainy season will be occasioned by the NE monsoon, which dashes the clouds, surcharged with moisture, against the Eastern Ghauts. On the Malabar coast, on the contrary, this monsoon will occasion dry weather. Hence it appears that the rainy season on the Coromandel coast must commence with the NE monsoon, about the middle of October, while, at that time, the dry weather begins on the coast of Malabar; and that the rainy season on the Malabar coast must begin in April or May, the period of the commencement of the dry season on the Coromandel coast. The rains on this coast are not, however, so violent as those on the Malabar coast. This seems to arise from the circumstance that the Eastern Ghauts are farther from the sea than the Western; and, consequently, the clouds are not so soon broken, and have also a greater space over which they can spread themselves before they are broken. It is not improbable, too, that the greater height of the Western Ghauts may intercept a larger portion of the clouds than the Eastern, and break those which it does intercept more completely. As the Western Ghauts extend no farther than the lat. of Surat, the SW monsoon, to the N of this lat., as far as it blows, carries the rain without interruption over the whole country. We have already mentioned the break in these Ghauts near Panianl. In consequence of this break affording a passage to the NE monsoon, from the Coromandel coast, ships which navigate the Malabar coast commonly experience a stronger gale in the neighbourhood of Panianl than on any other part of this coast. The lower part of the province of Coimbatour partakes of the rainy monsoon of the Malabar coast, which is probably occasioned by the same break permitting the SW winds to blow through the Ghauts in this part. The SW monsoon blowing so long, and part of the time with such violence, forces a great body of water into the gulf of Bengal; and during its prevalence, the surf on the Coromandel coast is very tremendous. The NE winds continue this surf, by impelling the waves on the shore, which is very steep, having, as was before observed, no soundings at the distance of 30 m.

*Seasons in H. Proper.*] Having thus briefly explained the monsoons and their effects in the S part of India, we shall now make some observations on the climate, as it respects wind, rain, and heat, in other parts of this country. In that part of Bengal which lies near the head of the bay, the winds blow alternately from the N and S, during unequal portions of the year. A N wind prevails during the cold season, that is, during October, November, and December; and a S one during the hot, that is, from March to the end of May. In the E parts of Bengal, a NW wind begins about the middle of March. During the prevalence of this wind, there are sudden and violent squalls of wind and rain, which are often very destructive to the boats on the Ganges. These squalls are more frequent in the E than in the W parts of Bengal. The most settled weather is between the end of the rainy season and the beginning of the NW winds. The seasons in Bengal are generally divided into cold, hot, and dry; but the natives

are more minute in their divisions, assigning six seasons to the year. The spring and dry season occupy four months, that is, February, March, April, and May. The periodical rains commence nearly at the same time over the whole of this part of H., that is, in the beginning of June. During the first two months there is scarcely an interval of two dry days; and the rain falls in such abundance, that 4 and 5 inches have fallen in the course of a single day. In August and September the intervals are more frequent and of longer duration, and the weather becomes sultry. As the cold season approaches, fogs and dews are very common and dense. See article *BENGAL*. This description of the climate of the prov. of Bengal will apply, in almost every particular, to the climate of the whole of H. Proper, except that in the mountainous parts the rainy season begins early in April.

*Rain*] When the quantity of rain that not unfrequently falls in Bengal, in the course of a single day, during the rainy season, and the long continuance of that season, are considered, we shall not be surprised that the average annual fall of rain in the lower parts of the prov. should be between 70 and 80 inches. During the SW monsoon at Bombay, the quantity of rain generally exceeds 100 in.; sometimes it reaches 110 or 112 in. At Madras, according to Mr. Cockburne, upwards of 30 in. fall in the course of one month; and yet he estimates that only from 45 to 70 or 80 in. fall in the course of the year, according to the situation and severity of the monsoon. During the first part of the rainy monsoon on the coast of Malabar, that is, in the months of May and June, a considerable quantity of rain falls on the table-land of Mysore; but it is uncertain whether this is the effect of the monsoon, or is merely the periodical tropical rain. In the NW extremity of the rajah of Mysore's territories, on the summit of the Western Ghauts, there are usually nine rainy months in the year. During six of these months the rain is so violent and constant that it is impossible to go abroad, and "it is customary to make the same preparatory arrangements for provision—water excepted—as are adopted in a ship proceeding on a voyage!" The elevation of this part of India is so great that the climate is a month later than it is on the sea-coast. In the mountainous parts of the prov. of Coimbatour, there are two rainy seasons; the first is in April: the second in July, August, September, and October. The NW parts of H. Proper seem the driest with respect to climate. "During the greater part of the SW monsoon, or at least in the months of July, August, and part of September—which is the rainy season in most other parts of India—the atmosphere is here generally clouded; but no rain falls except very near the sea. Indeed few showers fall during the whole year. Owing to this cause, and the neighbourhood of the sandy deserts which bound it to the E, and are not far removed from it on the NW, the heats are so violent, and the winds from those quarters so pernicious, that the houses are contrived so as to be occasionally ventilated by means of apertures on the tops of them, resembling the funnels of small chimneys."

*Temperature.*] The general temperature of India, it is evident, must be very high, especially in those parts, which, like Sind, are of a sandy soil, and dry climate, and in the southern provinces. In the more elevated regions, however, a considerable degree of cold is often experienced. The following table affords a comparative view of the monthly and yearly mean temp. at Calcutta, Madras, Bombay, and the Neilgherry hills, [8,000 ft. above sea-level,] compared with the temp. of the city of London:

	CALCUTTA.		BOMBAY.		MADRAS.		NEILGHERRIES.		LONDON.	
	Mean max.	Mean min.	Mean max.	Mean min.	Mean max.	Mean min.	Monthly means.		Mean max.	Mean min.
	3 P.M.	6 A.M.	4 P.M.	11 A.M.			6 A.M.	3 P.M.		
January,	75.1	63.	78.	76.	82.2	74.1	45.4	57.1	39.6	32.6
February,	80.	67.	78.	76.	84.5	73.8	45.4	59.1	42.4	33.7
March,	88.1	68.	81.	80.	87.6	78.7	58.	63.	50.1	33.7
April,	95.1	79.1	84.	83.	92.	84.1	58.	63.1	57.7	42.2
May,	97.1	80.1	85.	85.	94.3	85.1	57.	63.1	62.9	45.1
June,	88.	78.	86.	85.	90.	84.2	57.1	60.	69.4	48.1
July,	86.1	78.1	81.	81.	92.6	85.3	52.4	61.4	69.2	52.2
August,	86.2	79.3	84.	84.	89.9	83.1	57.	60.1	70.1	52.9
September,	86.	78.	80.	79.	89.7	83.3	54.1	60.1	65.6	50.1
October,	89.2	76.1	85.	84.	87.8	82.4	50.1	62.	55.7	42.1
November,	78.	65.2	85.	84.	84.3	80.1	50.1	61.1	47.5	38.3
December,	75.	59.	81.	80.	80.2	76.	46.4	60.	42.2	35.4
Annual means,	85.3	73.4	82.4	81.5	87.9	80.8	52.4	61.	56.1	52.5



In Calcutta, the heat is sometimes so intense that pigeons drop down dead at noon, while flying over the market-place. In the middle districts of Bengal there are occasional thunder-storms during the hot season, which render the atmosphere cool; and in the E districts the same effect is produced by occasional showers of rain. In the higher parts of Bengal, the weather is sometimes very cold. Between the latitudes of  $28^{\circ}$  and  $29^{\circ}$ , in the prov. of Delhi, the heat during summer is very intense; but when the wind blows from the northern mountains in the winter, the therm. often falls below  $30^{\circ}$ , and water freezes in the tents. The same description applies to the Shahrapore district of Delhi, which lies farther to the N, principally in the Doab. But the cold here is moderate, compared with what it is in some parts of Northern H. At the end of May in 1808, there were masses of snow about 70 ft. in thickness, lying undisturbed on the road to Bhadrinath, in lat.  $30^{\circ}$ . Even in the Benares district of Allahabad, the cold of winter is so severe as to render fires necessary, while in April, May, and June, the heat is very oppressive. The winters in the Deccan, which contains a large portion of high land, are cold. At Hyderabad, and the provs. to the N of it, the therm. during three months is often as low as  $45^{\circ}$ , and sometimes only  $35^{\circ}$ .—The climate of Sind, on the NW coast, has been generally described. It may be here added, that in the months of June and July, the therm. ranges from  $90^{\circ}$  to  $100^{\circ}$ . At Surat the variations are, in the course of the year, from  $59^{\circ}$  to  $96^{\circ}$ . At Bombay from  $64^{\circ}$  to  $98^{\circ}$ ; the former about the end of the year. The hottest months on the Malabar coast are April and May. In the former month, the maximum height of the therm. at Cochin is  $105^{\circ}$ .

The temp. of the coast of Coromandel is in general much higher than that of the provinces on the coast of Malabar; and the Carnatic and the NW extremity of the Northern Circars are deemed the hottest, not only on the Coromandel coast, but in all India. Taking the average of the whole year, the heat at Madras is less than that of Calcutta. In January the therm. is about  $70^{\circ}$ ; this is the lowest temperature. The highest is in July, when the therm. is about  $91^{\circ}$ . Taking Madras and Bombay as medium stations on the two coasts, the difference in winter-temp. may be stated at  $7^{\circ}$ .—Madras being  $71^{\circ}$ , and Bombay  $64^{\circ}$ . In April and May, before the showers, the therm. at Calcutta rises to  $110^{\circ}$ ; and a *coup de soleil* is almost the certain result of exposing one's self to the direct rays of the sun.—Extraordinary hailstorms occasionally occur in H. On the 22d of May, 1851, a storm of thunder, lightning, and rain, occurred near Bangalore, during which the hailstones which at first made their appearance, were about the size of limes and oranges, and broke through the tiles and roofs of houses, and destroyed gardens and fruit trees. Some of the hailstones found next morning were as large as goose eggs, some as big as pumpkins; one block, found in a dry well, measured  $4\frac{1}{2}$  ft. in length, 3 ft. in breadth, and  $1\frac{1}{2}$  ft. in thickness. It was probably the result of the cementation of several of the smaller pieces into one lump, although the fall of pieces of ice of this size is not unfrequent in India. In the reign of Tippu Sultan a piece was found the size of an elephant, which took several days to melt; in 1826, a piece of similar size fell in Candeish; in 1838, a block of ice, apparently a mass of cemented hailstones, was found near Dharwar, measuring 20 ft. in circumf.

**Disease.** It will be readily apprehended that miasma, or malaria, must be very prevalent in this country, especially in the tracts contiguous to the larger rivers. The incessant decomposi-

tion of animal matter, the insalubrious exhalations from the dense low jungles, the presence of extensive forests, and the extent of rice-grounds, are all powerful sources of malaria in this country; and it seems to be an established fact that miasmatic influence generates ague, remittent fever, malignant continued fever, dysentery, and disorders of the liver and spleen. In the Bengal presidency, fever is most frequent in the rainy and hot seasons, dysentery and diarrhoea during the rainy and cold seasons,—and hepatitis and cholera in the hot season. The banks of the Hugli and the district of Jessore, Murshedabad, Gundwana, and Cuttack, are considered very unhealthy places. The prevailing diseases in the presidency of Madras are fever, dysentery, and hepatitis; and the sickliest period is about the commencement of the monsoon, or from August to November. In Travancore, diseases of the liver appear to be particularly endemic among Europeans. The presidency of Bombay is the least salubrious. The singular affection of hemeralopia, or night-blindness, is very frequent among the natives. Pulmonary and bronchial affections are said to accompany fever in the northerly provinces. Rheumatism is the disorder of the elevated districts of the N provs. of Hindostan. Dr. Rankin considers as the primary cause of the endemic disorders to which Europeans are subject in India, an excess of heat amounting on an average to  $30^{\circ}$  above the temp. of Great Britain. At the same time it must be confessed that Europeans in India are seldom sufficiently attentive to their diet and regimen. Nothing can be more pernicious to a European constitution, under such a climate as that of India, than the practice of consuming a quantity of fish, meat, and eggs at breakfast; rich soups, roast meat, and fowl at dinner, with the usual allowance of wine, and occasionally malt liquor.

**Soil.** The soil of H. exhibits perhaps fewer varieties than might be expected in such a vast tract of country. In the whole of that district which is watered by the Ganges, the most prevalent soil is a rich black mould, evidently of alluvial origin. No other soil appears between the Tipperah hills on the E and the district of Burdwan on the W, nor below Dacca and Borleah to the N; nor is there any substance so coarse as gravel either in the Delta or nearer the sea than 400 m. along the course of the Ganges at Oudanulla. At this place, a rocky point, evidently stretching from the base of the neighbouring hills, projects into the river. In other parts of Bengal and the adjacent provs., there is a considerable extent of clayey soil; and that this was the original soil, where the black mould is now found, is proved by the appearance of the beds of the rivers, which are of clay. The substratum of the soil in this part of H. Proper is in many places calcareous; in others clay; in a few instances rocky. The soil of the Punjab resembles that which chiefly prevails in Bengal, and is equally fertile. As we approach to the SW into Sind and Gujerat, the soil becomes more sandy; in Malwah, it is a deep, black, rich mould. Of this kind of soil there is one variety, named by the natives *eyrey*, which is deemed very unhealthy. The whole of the plain of Chitteldrug, in the Mysore, which is 10 m. from N to S, and 4 m. from E to W, consists of this kind of black mould to a great depth. The provs. of Gundwana and Orissa contain the largest proportion of poor unproductive soil perhaps in all H. To the S of these the soil near the coasts both of Malabar and Coromandel is sandy, and generally of a poor quality; it is more fertile, however, as the mountains are approached. In the prov. of Malabar, the soil at the foot of the low hills which intervene between the sea and the Ghauts is a red clay or brick earth. On the Coromandel side, the sandy soil continues nearly to the foot of the Eastern Ghauts. The soil on the table-land, and also in the extreme southern provs. of India is of various quality; but is in general a loam on rock, and very fertile.

**Vegetable kingdom.** We can only devote a few sentences to the natural history of this country, rich indeed though it be both in vegetable and mineral treasures. India produces those species of grain which are most common to Europe; but rice, as it forms the chief food of the inhabitants, is the great object of culture, and is a grain which the levelness of the country peculiarly fits it for producing. There are no fewer than 27 varieties of it cultivated; and

under the best cultivation the land brings forth crops all the year round. Maize seems next to rice to be the most extensive crop at least in the western provs., but wheat and barley are likewise successfully cultivated. Sugar-canes and cotton are reared in many places; but the tobacco of H. is said to be inferior to that of America, probably because it is cured with less skill. Mulberry-trees are carefully reared for the purpose of breeding silk-worms. Indian silk, however, is considered inferior to China silk by 9, and to Italian silk by 11 per cent.—The species of trees are very numerous. Among them may be distinguished several species of the numerous and peculiar family of palms, of which that producing the cocoa-nut—*Cocos nucifera*—is the most remarkable. This palm is seldom seen wild; but is everywhere cultivated on account of its nuts, which are chewed with betel. A vigorous tree will yield 500 full grown nuts in the season. On the coasts of Malabar and Canara palms are very abundant. The large fan-palm has leaves of which one is sufficient to cover ten men; and three or four will thatch a cottage. The leaves of the smaller fan-palm are used as paper; and from its trunk, as also from the nut-bearing palm, is procured a liquor called *palm-toddy*—the palm-wine of Africa—which becomes *arrack*, after it has undergone the vinous fermentation; and when boiled down to a syrup is called *jaggery*, and serves as a substitute for sugar. The plantain produces a fruit which in many places is used as bread; and the teak-tree—*Tectona grandis*—is said to excel British oak in the building of vessels. The bamboo—*Bambusa arundinacea*—is a most valuable tree, or, to speak more correctly, reed. It will shoot up to the height of 60 ft. in a season; in one year it attains its full growth, and during the next the wood consolidates, and acquires those properties of hardness and elasticity which render it so useful for a variety of purposes.—The fruits of H. are very numerous. Cocoa-nuts and plantains have been mentioned; to these may be added pomegranates, citrons, dates, almonds, grapes, ananas or pine-apples, and tamarinds. In the northern provinces, apples and pears are plentiful. Oranges and lemons are also grown, but are said to be of an inferior quality. The fruit called mango, one of the most exquisite of all the fruits of India, is found abundantly to the W of the bay of Bengal. The mangosteen is the most delicious fruit that grows in British India. The durion is a fruit of most offensive smell but exquisite taste. The small-fruited banana has in all ages been the food of the Indian philosophers.—Many trees and shrubs useful in medicine or the various arts occur in India, though in these respects the country cannot vie with the Eastern archipelago. Among those used in medicine are the *Cassia fistula*, *Nux vomica*, and *Laurus cassia*. Among those useful in the arts are the tree whose gum is well known by the name of *gamboge*, and the *Casalpina sappan* used in dyeing red. The cotton-tree also flourishes here. Many of the trees yield wood of a beautiful grain, capable of the finest polish, and consequently much used in cabinet work. Sandal-wood is almost exclusively confined to the SW of Mysore. The pepper-vine is found native in some places of India. The *Papaver orientale*, from which opium is obtained, thrives in almost all the provinces. Indigo is cultivated on a large scale in Bengal, Bahar, Oude, and Agra. Of the poas, the *Poa cynosuroides*, the kossa grass of the natives, deserves particular notice. It is regarded as a sacred grass, and is held almost constantly in the hands of such as are anxious to be regarded as particularly devout. It is also of considerable use in this climate, as it is from its roots that the kind of mats called *tatts* are made, which are placed against

the doors or windows, and constantly watered, to keep the rooms cool; as its natural fragrance is pleasant, it spreads an agreeable scent as well as freshness through the apartments. On the E frontiers of Bengal, there is an immense extent of land covered by a peculiar kind of grass, called by the natives the *augeah* grass. The soil on which it thrives is sandy. It grows to the height of 30 ft., and is as thick as a man's wrist. The jungle-grass is very common in many parts of H. In the Rajmahal district of Bengal, it attains the height of 8 or 10 ft.; and on the top of it there is a beautiful and elegant down, resembling the feathers of a swan. When we come to treat of the agriculture of India, we shall have occasion to notice some plants and productions, which are more properly treated under that head.

*Zoology.*] The zoology of India is extensive, but our limits preclude us entering into details. Among the domestic or tame animals may be enumerated elephants, buffaloes, oxen, horses, asses, and mules. The Indian elephants differ from those of Africa in having the transverse ridges of enamel in the teeth smaller and more numerous, and a toe more upon each foot. About 9 ft. is the standard height for male elephants; and such an animal will carry a load of nearly a ton.—The dromedary is found in some places, but appears not to be common in every part of H.—Horses are numerous; but as the breed is not equal to that of Arabia, the wealthy are supplied from that country and from Britain. The native breed of horses in India is a small ill-shaped vicious pony, in some parts not exceeding 30 in. in height, particularly on the confines of the Nepalese territories. Wild horses, of a hardy and useful breed, spotted in a singular manner, and with great variety of colour, are regularly brought from the banks of the Bontsu in Nepal, for sale. Horses brought from Candahar and Tibet are sold at the annual fairs of H. In the Chotisgur district of Gundwana, brood mares of the *tattu* species are kept in considerable numbers. This is the same species that is common in Bengal; it is a thin ill-shaped animal. The horse commonly used by the Mahrattas in war is a poor looking animal, about 14 or 14½ hands high, with large bones; but in the Puna Mahratta territory, particularly near the Bimah river, beautiful horses, of a middle size, and generally of a dark bay colour, with black legs, are reared, which are highly esteemed by the Mahrattas. In the prov. of Aurungabad also great numbers were reared for the Mahratta cavalry. In that part of the prov. of Bahar which lies near the Nepalese territories a number of horses are bred for the British cavalry. It has been satisfactorily ascertained that this animal degenerates in size, and in most of his useful qualities, in low and moist situations; hence the horses of Bengal are of inferior description and small size. In dry and moderately elevated situations, on the contrary, they thrive well, and are strong, active, and handsome. Since the British began to pay attention to the breeding of horses in the N parts of Bahar, many of the very first quality have been reared there, particularly in the districts of Tirput and Hajipur; and they are in such request, that horse dealers from Upper H. frequent the fairs at Hurdwar and other places to purchase them. Farther to the N, however, where the country becomes very mountainous, the horses fall off in point of size; but though nearly as small as those of Bengal, they are much more handsome, active, and strong. The British have also frequently obtained horses from the middle districts of Gujerat and from Lahore; the latter are particularly excellent.—In some parts of India the ass is a common and useful animal, parti-

culrly in Bengal, the Carnatic, and above the Ghauts. They are small in size, and are distinguished by the great variety of their colour. Herds of wild asses are sometimes seen near the mountains in the N.—The cattle kept in India are the common black cattle, and the buffalo. They are both very numerous, particularly in the Ceded districts, where, in 1806, there were 1,198,613 black cattle, and 1,147,492 buffaloes; in Bengal, where it is supposed that there are of both kinds above 50,000,000; and in Gujerat, where the bullocks are reckoned the strongest, swiftest, and handsomest in India. From the Chotisgur district of the latter prov., which contains about 20,000 sq. m.,—part of which is mountainous, or covered with jungle,—are exported in favourable seasons 100,000 bullocks. The British government in India have paid considerable attention to the improvement of the breed of bullocks for their ordnance; but there are only two districts in the Bengal presidency in which bullocks of a size required by the British for this purpose are bred,—the Purneah district of Bengal, and the Sarun district of Bahar. The bullocks of the former are of a large size, very strong and active, well-formed, and much superior to the cattle employed for draught in the lower parts of Bengal. The bullocks in the Sarun district are not so excellent in their qualities, nor so large, but they are little inferior in these respects. The common draught cattle all over India have a hunch on their shoulders, on which the yoke rests; they are of a white colour, small size, but active and well-proportioned.—The sheep in India are small, generally of a black or dark grey colour, with wool like hair for hardness and coarseness, and scarcely fit for any purpose. In Allahabad, and on the Comorandul coast, the sheep are small, and of an inferior quality, even compared with those of Bengal. In 1806, the number of sheep in the Ceded districts amounted to 1,147,492. They are also numerous in the Mysore, where they are of three varieties of colour, red, black, and white. Here the shepherds and their families live with their flocks, the men sleeping in the open air among their sheep, wrapped up in blankets, and the women and children under baskets made of leaves, and about 6 ft. in diam. In the S of India sheep are most extensively bred in Coimbatour, particularly in the Aranasi district. There are in Bengal a few sheep with four horns, and superior in size to the common kind.—Goats are by no means uncommon in the hilly districts of India. They resemble in size, &c., the European goat.—Swine were common in the Mysore till they were almost extirpated by Hyder Ali. They are not numerous in any part of H., either domestic or wild.—The wild beasts are numerous, particularly in such parts of the country as are but thinly peopled. The lion has been supposed to be unknown in H., but our countrymen have both hunted and killed lions in the neighbourhood of Bombay. The chief haunts of the tiger are near the banks of the Ganges. His leap is said to be sometimes not less than 100 ft.,—an assertion in itself not very probable, and the truth of which it would be difficult to ascertain. The minor animals of prey are leopards, jackals, wolves, bears, wild boars, panthers, hyænas, lynxes, and foxes. In the forests near the Circars the ourang-outang is found, and apes and monkeys of different kinds are very numerous. The rhinoceros is common in Northern H.; and is said to occur in some of the isles of the Ganges. Different kinds of antelopes are numerous; with red deer, fallow-deer, musk deer, and elks. In the northern districts are many species of small animals, among which may be mentioned the musk-weasel.

The birds of India are very various, and some of

them uncommonly beautiful. This is the native country of the peacock, which here exists in almost every part in a wild state. Near Cambay, and in different parts of the prov. of Malabar, they are particularly abundant. The historians of Alexander mention the delight and surprise with which that conqueror first beheld the peacock, and that he forbade them to be killed under very severe penalties. There are few birds, natives of India, so remarkable, and which have so excited so strongly the attention of naturalists, as the gross-beak—*Loxia Philippina*—the olomari of the Malabars. It is described in the *Asiatic Researches* as “rather larger than a sparrow, with yellow brown plumage, a yellowish head and feet, and light coloured breast, and a conical beak, very thick in proportion to its body.” They chiefly frequent the cocoa-nut trees, or the palmyra and Indian fig, being partial to a lofty site. This bird constructs its nest in a very curious way, with the long fibres of plants or dry grass, and suspends it by means of a kind of cord nearly half-an-ell in length, from the extremity of an extremely slender branch of the tree, in order that it may be inaccessible to snakes and other animals. This bird is much valued in H. for its docility and attachment to those who domesticate it. The common fowl is found in the jungles, and is called the jungle bird; and the wild cock, the feathers of which are of various colours, and shine like gold, is found in the Ghauts and the adjacent forests. The *Pelicanus onochrotalus*, or large Asiatic pelican, is found in Malabar. This prov. is also the native country of what is called the Malabar bat, *Vespertilio vampyrus*, or *caninus*. The *Gracula religiosa*, common in the districts adjoining the Ghauts, is a bird held in considerable esteem by the natives on account of its song. The eigrus, the largest of aquatic birds, is found among the lakes in the N of H. Proper, where it is kept by the natives in their gardens for the purpose of picking up the vermin. Parrots of almost all the varieties abound.

The *Coluber naia*, or *Cobra de capello*, the most poisonous of all the species, is one of the most common snakes in Malabar. The mountain-snake of the Ghauts seems to resemble the boa constrictor, as it is represented by Bartolomeo, as being from 30 to 40 ft. long, and as thick as an ox.—The insects are very numerous, and in great variety in all parts of India. The *Termes jutale*, or white ant, which is particularly noticed by Herodotus and Arrian, is here very destructive. The *Meloe trianthema* is found in great quantities in the Doab, and in that tract which stretches along the r. bank of the river Jumna. The *Meloe cicorei* is principally found in Bengal, Berar, and Oude; it subsists on the flowers of the cucurbitaceous plants, and also on those of the hibiscus and sida species, and is most abundant during the rainy seasons. The fire-fly is very common in India, and is one of the most beautiful insects of that country; the trees are sometimes so completely covered with it as to appear like “pyramids of light.” The most troublesome insects are the flies, mosquitoes, chinchies or bugs, and the chigoe, a small worm which deposits its eggs under the skin.

In the Ganges there is a great variety of fish. Of all the kinds found either in this river, or in any other part of India, the most delicate and highly flavoured is the mango fish, so called because it appears in the rivers while the mangoes are fit for use. The other kinds of fish in highest repute for their flavour are the cockup and the sable fish. The coast of Chittagong is celebrated for oysters. Oysters are also plentiful in the rivers of Cochin, where they are fished for in the same manner as the pearl-oyster. Turtle are found in the Ganges, but small and of inferior quality. The salmon frequents the sea-coast



and the rivers of Malabar, and pilchards in immense abundance are found on this coast. In the Alakananda river there are many fish of the *Cyprinus* genus, particularly *C. denticulatus*, which grows to the length of 4 or 5 ft., and even 7 or 8 ft. They are represented as very beautiful; the scales on the back and sides are very large, and of a fine green colour, with a bright gold edge; the belly is white, with a slight tinge of gold colour; the tail and fins are of a dark bronze colour. Alligators and porpoises are common in the Ganges. The whale is sometimes seen off Cape Comorin. The sword fish is very abundant in almost all parts of the Indian seas. The sea hedge-hog, sea-star, sea-nettle, &c., are common in the Indian seas.

*Mineralogy.*] The mineralogy of India has not yet been very carefully or thoroughly examined. The Ghauts are composed of a granite in which the feldspar and quartz, both of which are remarkably white, bear more than the usual proportion to the mica, which is of a dark green colour. Many of the masses of rocks in the Mysore country, on which the almost impregnable fortresses of Tippu were built, are of granitic porphyry, and rise into high sharp peaks. Granite seems to form the principal mountains in H., as well as the Ghauts. It is found mixed with the soil in the neighbourhood of Rajamal, a town situated on the SW side of the Ganges, in lat.  $55^{\circ} 2'$ , but not lower down the river. Limestone is found in many places, particularly among the hills near the bed of the river Palar, in the vicinity of Arcot, where it is found in the form of nodules. This species of limestone forms the *chunam*, that is used by the natives along with the *areca-nut* and *betel*. *Chunam* is also met with in almost inexhaustible quantities in the Silhet district of Bengal; and from this district Calcutta and the most remote parts of the prov. are supplied with it. In the neighbourhood of Bombay a good deal of *chunam* is made from shells. The Madras *chunam* is smooth, hard, and polished as marble. There are marble quarries of considerable extent, which yield marble of excellent quality, in the prov. of Ajmir. Other stone proper for building, particularly what is called the Theban stone, is abundant over H. Proper, and is by no means rare in the Deccan and the S of India. In Bombay there are large quarries. In the prov. of Oude, lapis lazuli of an excellent quality occurs.—The diamond mines of India have been long known and celebrated. The most remarkable is that of Pannah, which seems to have been known to Ptolemy. The emperor Acbar, among his other plans for improving and enriching his territories, paid great attention to this mine, from which he drew 8 lacs of rupees annually. The native chiefs of Bundelcund, as well as the last Mahratta conquerors of this district, also raised considerable revenue from this mine. Besides the diamond mine of Pannah, there is one other to the N of the Deccan, near Sumbulpur, in the prov. of Gundwana, near the junction of the Hebe with the Mahanadda: the other diamond mines are to the S of the Nerbudda. About the middle of the 17th cent. the diamond mines in Sedhout, a district in the Balaghaut ceded territories, were very productive; but these, as well as all the other diamond mines of H., have long ceased to be very valuable, being either exhausted or neglected. There are also mines at Raolconda, about 40 m. NW from the junction of the Bimah and the Kristna; at Colore, on the S bank of the latter river, not far from Condavir, in the Gentur circar; and in Golconda. Cornelian and other opaque stones are found near Cambay, and garnets near Hyderabad.—The metals found in H. are gold, iron, and lead; there are no indications of silver; and with respect to cop-

per, though it has been enumerated by some authors among the metals of H., there seems no foundation for the statement. There are no mines of gold; this metal being only found among the sand washed down by the rivers. The quantity thus obtained from the Indus and its tributary streams was probably much more in ancient times than it is at present. Herodotus informs us that the tribute paid by the Indian satrapy of Persia to Darius Hystaspes was in gold; and that the sum paid was nearly one-third of the whole tribute paid by all the 20 satrapies. In the Ayin Acbari we learn that gold was found in the channels of the Ravi and in Kemann. In many of the rivers of Assam which flow into the Brahmaputra gold occurs, especially in the Dekrungi, which is famous not only for the quantity but the quality of its gold. In the E extremity of the rajah of Mysore's territories, an area of country comprising 130 sq. m. is said to contain gold dust. In the Fernadu district of the province of Malabar, gold dust is found in a branch of the river which falls into the sea at Parapanda.—Iron ore is not common; it seems to be chiefly bog iron ore, or particles of iron mixed with sand. Of the latter there is a considerable quantity in the Mysore rajah's dominions, not far from Severndrug. Indeed, the Mysore seems to be more abundant in this metal than most other parts of H. At some of the iron works 47 per cent. of malleable iron is obtained from the ore, but it is by no means in a pure state. On the W side of the S of India, iron occurs in the Velater district of the prov. of Malabar. The highland district of Bahar is also rich in iron, which is fused for sale by the natives in large quantities. On the SW coast of the Gujerat peninsula, there are likewise extensive works for fusing this metal. There are lead mines in the territories of the rajah of Jodpur, in the prov. of Ajmir; and rich iron-ore is abundant in Cutch, where it is skilfully wrought.—The manufacture of salt from seawater, and of saltpetre, will be noticed afterwards. Mines of rock-salt occur in the district between the Indus and Jelum, in Lahore. They are uncommonly productive; and the fragments of rock-salt are sufficiently hard to be shaped into different kinds of vessels, &c. Large lumps of it are brought down to Amritsir, the cap. of the Sikhs, slung on each side of camels. In some parts of the Mysore, the ground is strongly impregnated with salt, particularly in the low moist parts of the district of Cotlar, where during the dry season it is extracted, the surface of the ground having been previously scraped off, and collected into heaps. The grain of this salt is large, and the crystals well-defined; it is however by no means pure. During the reign of Tippu, when in consequence of his regulations the trade with the Lower Carnatic was declared contraband, the salt was extracted from the soil in very large quantities, but the natives entertained a strong prejudice against it. Earth similarly impregnated with muriate of soda is found in the prov. of Coimbatour, to the S of the Mysore; but here the muriate seems to be mixed with the nitrate of soda. Much of the well-water here has a saline taste. A thick coat of salt, as white as snow, is spread over part of the morass Calud, in the Runn; and salt lakes occur near the sources of the Indus, at an elevation of 16,000 ft. above sea-level.—Coal is wrought in Silhet, and likewise in Burdwan. It has also been found near Hardwar in the Himalaya, and in Cutch.—Sulphur is found about 30 m. to the N of Odipur, in the SE quarter of the prov. of Ajmir, but it is neither so strong nor so pure as that which comes from Surat.—There are several mineral waters, particularly in the hilly districts of H.; such as are warm are deemed sacred. Most of the wells in the vicinity of the city

of Odipur, though they are by no means deep, are strongly impregnated with some mineral substances, probably with iron, but they have not been analyzed. In the Boglipur district of the prov. of Bahar, about half-a-mile from the banks of the Ganges, in a plain nearly surrounded with rocky hills, is a celebrated hot spring, from which the flow of water is considerable. Though there are several cold springs not more than 20 yds. from it, the water is so hot that the hand cannot be long kept in it. Another hot well, held in great veneration by the Hindus, occurs about 20 m. to the N of Islamabad, in the Chittagong district of Bengal.

*Agriculture.*] The agriculture of H., generally speaking, is in a very rude and imperfect state: there are, however, districts in which this art has reached a state of improvement not inferior to that in which it exists in many parts of Europe. Perhaps the Burdwan district of Bengal deserves the first place in the scale of agricultural excellence, and the prov. of Tanjore the second. Many parts of the prov. of Allahabad, and especially the district of Benares, rank nearly on a level with Burdwan and Tanjore. In the neighbourhood also of the city of Patna, the cap. of Bahar, the husbandry is excellent, the fields in many places being cultivated with such nice and minute attention as to resemble gardens. Travancore is distinguished for its excellence in what is called the wet-cultivation. The agriculture of the Circars is also good. From this prov. and Tanjore the Carnatic is frequently supplied with grain; the Circars being esteemed its granary during the NE monsoon, and Tanjore during the SW monsoon. Formerly the Punjab exhibited undoubted proofs of good husbandry, and its crops, owing to this and the natural fertility of its soil, were abundant; but in consequence of the devastations from war it has sustained, and the number of petty hostile states into which it was long divided, it is now but imperfectly cultivated, and contains a large proportion of land absolutely waste and neglected. That part of Agra which is called the Doab, was formerly, like the Punjab, cultivated with skill and success, especially during the latter part of the nabob of Oude's government: at present its cultivation is improving, as indeed is the case with most of those parts of India which are placed under British authority. The parts of the Deccan in which the condition of agriculture rises above the level of that generally practised in H., are the low districts of Aungmyab, some parts of Berar, and the Circars. In the S of India, besides Tanjore and Travancore, which rank in the highest class, the industry of the husbandman in the Ceded districts has raised agriculture to a considerable degree of perfection; but in no part of India has the husbandman had to struggle with greater difficulties in the improvement of his land, and nowhere has he surmounted them more completely, than in Canara. The larger portion of the surface of this prov. is so rocky and uneven, that nearly all the agricultural labour, and especially the indispensable previous operation of levelling the ground, must be performed without the aid of cattle. And, even after the land is brought into a state of cultivation, it would soon revert to its original character, and be broken up by the torrents from the mountains, were not the husbandman constantly alert and active. Notwithstanding these difficulties, there everywhere throughout this district appear undoubted proofs of good husbandry, not merely in the quantity produced, but also in the neatness of the culture, and the regularity and method with which it is carried on. The circumstance that each man here cultivates his own land, and that the subdivisions of property are very minute, may

doubtless account in some measure for this superiority in the arts of cultivation. The same character applies to the husbandry of Malabar; each proprietor bestowing on his little spot "all that minute labour and attention which is so important to Indian husbandry." The tract of land in N. Coimbatour, which lies near Mutu and Colegala, and that part of S. Coimbatour which stretches along the banks of the Amarawati, are remarkably well-cultivated, particularly the first district, in which the management of rice is equal to that of any other part of India. The same remarks apply to the rice-cultivation in the valleys of Cochin. From this sketch of the general state of agriculture in H., it will be seen that, with a few exceptions, that of the S of India is superior to that of H. Proper; and that the husbandry of the Deccan is inferior both to that of H. Proper and the S of India.

*Modes of culture.*] Over all H. as in every country that lies within the tropics or only a little beyond them, the general mode of cultivation, as well as the particular crops cultivated, depends in a great measure on the more or less abundant and regular supply of water. Hence arise two distinct modes of cultivation in H., besides subdivisions of these modes. The two leading species of cultivation are denominated *nunjah* and *punjah*; the first being the wet-grain culture, the other the dry-grain culture. The first is more generally practised than the second, and is deemed more valuable and beneficial. The grain cultivated on nunjah lands is generally only of one kind, or at most of two, and is consequently cut down at one season or two; hence the produce of this land can be stored, watched, and sold, with greater facility and at much less expense than the other kinds of grain. In the S of India the produce of nunjah land was always divided between the government and the cultivator. Punjah land is in almost every respect the reverse of this. The grains sown on this land are very numerous, and are put into the ground at various periods; the produce is uncertain, depending on the rain that falls; and the gathering of the crop must be performed at different times, for that part of it which carries grain in the ear must be reaped at one season, and that which carries it in the pod at another. Hence, the produce being uncertain, and the labour great, the revenue exacted by government from punjah land was uniformly paid in money. This kind of land appears to have been brought into cultivation after the nunjah land, as it generally lies at a considerable distance from the village.—*Nunjah mail punjah* is a species of nunjah cultivation, carried on either in the stubble of paddy or nunjah land, or when, from an accidental deficiency of water, land which is usually cultivated with rice becomes unfit for that grain. In these cases the cultivator, availing himself of the moisture remaining in the ground, or of the water that may be drawn by picotahs to the field, sows the best kinds of dry grain.—*Vannyer, or totical lands*, are lands managed according to garden-culture, in which the more valuable articles, such as sugar-cane, tobacco, chillies, &c., are grown. These lands are generally secured against a failure of water by artificial means.

*Irrigation.*] The nunjah lands are rendered fit for wet-grain cultivation by the overflowing of the rivers,—by canals and water-courses cut from the rivers and streams, for the purpose of irrigating them,—or by water drawn from tanks and wells. The Ganges and its branches are the great sources of fertility to that vast tract of country which lies near their banks, in H. Proper. The Punjab, or that extensive tract of country which is watered by the E branches of the Indus, is not sufficiently inundated and enriched by these rivers: the lower part only, towards Multan, which is very flat, deriving this benefit to its agriculture from the periodical rains which fall between the months of May and October. The lower part of Sind is also inundated by the Indus; but this river and its branches do not, unassisted by art, greatly or extensively benefit agriculture. Though artificial inundation from the Ganges is not carried to such extent, nor conducted with so much skill as it might be, it is not entirely neglected; and much has of late years been done for its improvement and extension by opening up the old lines of canals. Tanks, or reservoirs of water, are constructed either by digging or by shutting up, by an artificial bank, an opening between two natural sides of hills. The former mode is practised in Bengal, and in other parts where the surface is level, and the soil loose, and free of rocks; the latter, in the more hilly districts of the Deccan and the S of India, where natural situations are met with in abundance. In Bengal, and other flat districts, the tanks are generally lined with stone, and their bottoms rendered hard and impervious to water by a mixture of chunam and clay. In these parts of H. they frequently cover 100 acres of land. Tanks are constructed either by government or by rich individuals. In the former case, a tax is levied on the land for their repair; in the latter, they are kept in repair by the person who constructs them, but, as a compensation, one-fourth part of the lands which receive water from the tanks is given up to him in full proprietary right. Tanks are very numerous, and some of them very extensive in the Carnatic; where, indeed, from the extreme aridness

of the soil, and the want of water from other sources, they are indispensably necessary to cultivation. Some of them in this district occupy an area of 8 m. in length, and 3 m. in breadth; and contain water enough to supply the lands of 32 villages for 18 months. In the villages watered by one tank are 5,000 persons employed in agriculture, and at another place there is a tank which waters 2,500 acres. In Malabar, Congo, Wynad, and in the vicinity of Surat and Bassel, irrigation by means of tanks is carried to great perfection.—Wells are also constructed in many parts of H., at great labour and expense, not only for domestic purposes, but also for irrigating the land. In the elevated and sandy districts of Ajmir the wells are from 100 to 200 ft. deep, made of brick. In Gujerat there are a greater number of wells. In the sandy soil of this prov., which lies to the N of the river Mahe, the wells are from 80 to 100 ft. deep; but in the adjoining prov. of Malwah they are still deeper; the inhabitants being frequently under the necessity of digging to the depth of 300 ft. before they obtain a sufficient supply of water.—Land under water-courses is more productive than land under tanks or wells, in the proportion, in land of the first quality, of 146 to 97; in land of the second quality, of 119 to 86; and in land of the third quality, of 97 to 75.

*Cereals.*] Wheat, which is probably indigenous to the region stretching from Afghanistan to the Caspian, is principally cultivated in H. Proper, and in one or two provs. of the Deccan; but the climate to the S of the Deccan is much too hot for it; nor, indeed, is there much demand for it, in consequence of rice being the favourite and almost universal food of all classes; but from Allahabad to the frontiers on the N, wheat is the principal object of the farmer's attention. It is sown on sandy loams, which are ploughed once about the commencement of the rainy season in June, and after the rain ceases are ploughed repeatedly again. In September or October the seed is sown; and when the dry season begins it must be watered. It ripens in January or February. The average crop is estimated at 15 maunds per bejah, or 7 quarters per acre. The wheat of the prov. of Bahar, especially that part of it which is watered by the Ganges, Sone, &c., is of a superior quality to that which is usually grown in India: that perhaps of the worst quality is grown in the Dinajpur district of Bengal. Gujerat is famous not only for the quantity, but also the quality of the wheat it produces, especially on the rich black soil near Wurgaum. From this quarter Bombay is principally supplied with wheat. In the valley of the Nerbudda soft wheat, or *dudya*, sells for 3 rupees per 400 lbs.; hard wheat, or *julalya*, at 4½ rupees.—Barley is a most abundant crop in all the upper districts of India, where it is made into thin cakes by the natives. March and April are the harvest-months for wheat, barley, and the grains which are sown with them. As there is a very great and almost universal demand for vegetable oil among the natives of H., such plants as produce it are cultivated most abundantly in both harvests, mixed with other crops. Flax and mustard are generally sown along with wheat and barley for this purpose; and as they ripen first, they are pulled from among the wheat and barley. The latter are reaped together; but are necessarily much injured by pulling out the flax and mustard, and still more so when the plant affording the yellow dye is also sown in the same field. The produce of these grains is also diminished by their being often permitted to stand till they are over-ripe.—Rice is cultivated much more extensively than any other crop in India: indeed there are very few provinces in which it is not the most-prevalent crop. There seem to be three kinds of it in the S of India. The first is reaped in September; the second in December and January; and the third in March or April. But in most parts of India there are only two kinds; the common rice, and a kind of which the grains are very white and small, with an aromatic taste. There are three modes of sowing this grain practised throughout India generally. According to one mode, the seed is sown dry on the fields which are to bring it to maturity.

By the second mode, the seed is steeped in water till it vegetates, and the field in which it is to be sown is watered till it becomes a kind of puddle: this is the sprouted cultivation. The last mode is by transplantation. A piece of rich ground is selected, in which the seed is sown; and as soon as the plants have attained the height of a foot they are transplanted. The means used to sink it to the bottom of the field, which is covered with water, are very simple and effectual. "A small ball of clay is formed around the root of each stalk, to carry it perpendicularly to the bottom, and to secure it nourishment, till the roots, by spreading, procure a more liberal supply." [*Tennant.*] In a wild state, this grain sows itself in the first month of winter, and at the approach of spring begins to appear above the ground; it ripens during the rainy season, and drops its seed at the beginning of winter; but, in order that he may have two crops of this necessary and valuable grain, the ryot sows it not only at its natural period of vegetation, but also during the second month of the rainy season, that he may reap a second harvest at the beginning of winter. In those parts of H. Proper, where rice is cultivated on good land, well managed, 5 quarters per acre are deemed a large produce, or a return of 15 for 1 on the seed. In some parts of Mysore, the first quality of land will produce from 47 to 49 bush.; the second from 35 to 42; the third from 17 to 24. Where it is necessary to use artificial means to water the rice, the rice fields are divided into squares of 100 or 120 yds., round the sides of which borders are constructed high and firmly, to retain a sufficient quantity of water; furrows are made from one square to another, by which the water is without much labour carried all over the rice field; and at harvest it is cut with a sickle, nearly 4 ft. of the shaw being left on the ground to rot and serve as manure. Rice is cleaned with a wooden pestle and mortar; and this operation, like all the other operations connected with husbandry, is paid for in produce,—the person performing it binding himself to deliver back five-eighths of the weight in clean rice, receiving three-eighths with the husks for his labour. It is afterwards scalded in hot water, spread out on mats to dry in the sun, and deposited in *patagas*, or granaries built of oak wood. The district of Dacca-Jelalpur is deemed, from the immense quantity of rice which it produces, the natural granary of this grain for all Bengal.—Maize is little grown, except in the western provs. of H. Proper, on the poorer soils and hilly grounds. Millet is much more extensively cultivated; there are several varieties of it. Though a small-eared grain, it furnishes a great quantity of straw, 10 ft. long, which is used as provender for the cattle. The Doab is particularly distinguished for its culture of millet. A very important grain in the Deccan is *natchni*, or *rugi*,—the *Cognosurus corocanus*, which returns 200 for 1.—The pulses and legumes cultivated are exceedingly numerous.

*Indigo, &c.*] In a commercial view, indigo has taken the lead of every other Indian product. Though raised and manufactured from time immemorial, it is only about 30 years ago that, through the exertions of several enterprising Europeans, its cultivation was extended, the successful prosecution of which is chiefly owing to the small duty—almost nominal—levied on its importation into Britain. Some idea may be formed of its importance from the fact, that in the presidency of Bengal the cultivation of indigo occupies upwards of 1,000,000 statute acres, and produces annually about £3,000,000. The amount imported into Great Britain in 1844 was 19,642,877 lbs.; in 1845, 9,845,920 lbs.—Silk is another staple article of India. It is produced largely in Bengal, and to



a limited extent in the upper provs. The quantity exported to Britain in 1834 was 1,203,658 lbs.; in 1845, 1,723,298 lbs. The production of this essential and beautiful article of commerce is in the hands of ryots, or small cultivators, to whom advances are made by the Company, who in return expect the amount produced to be delivered to them. In the presidency of Bombay efforts are being made, which promise success, to extend the production of raw silk, by which means England may at no remote period be rendered, in reference to this material, independent of every other country.—Opium is grown almost exclusively in the central provs. It is cultivated extensively in Benares and Bahar, and constitutes in great part a monopoly in the hands of government. It is a very uncertain crop, the produce of an acre varying from 20 to 40 lbs. It also requires much labour in the cultivation, and in the gathering of the juice which is afterwards evaporated into opium. Besides the opium itself, the cultivator obtains about 40 lbs. of poppy-seed from an acre of land, and frequently from the same land a crop of pot herbs, or some other early vegetables or grain. In Bahar, the cultivation of the poppy and the manufacture of opium are carried on so extensively that 8,000 chests of the latter may be exported annually; but it is a general complaint in Europe, that in this, as well as other provs. of H., the opium is frequently adulterated by a mixture of cow-dung, an extract from the leaves and stalk of the poppy, the gum of the mimosa, and other substances. In the ceded districts of Mysore, poppies are cultivated not only for the purpose of making opium, but also for their seed, from which when ripe an intoxicating liquor called *post* is made. The opium made from the poppies grown in Malwah is deemed much inferior to that of Bengal, and is almost always adulterated with oil and other substances. In some of the provs. in the S of India, the poppy is cultivated almost entirely on account of its seed. The quantity of opium shipped from Calcutta during 1829–30, amounted to 2,678 chests, and the price at which each chest sold was 1,200 dollars. This stimulating drug—used by the Chinese as we do wine and spirits—has been for many years introduced into China clandestinely to the amount of upwards of £3,000,000 per annum. The quantity of Indian opium introduced into China in 1832–3 was 23,693 chests. The opium exported in 1847–8 was 23,877 chests.—Sugar is another important product, in general use among the Hindus. It forms, indeed, an essential ingredient in almost every domestic preparation, whether of food or drink. The amount produced is not only very great, but the quality is good, equal in purity and strength to the best Mauritius or Demerara sugar. The average import of sugar into this country from British India for the 5 years from 1841 to 1845, was 1,156,773 cwt. —Coffee forms no unimportant article of Indian produce. In Malabar, Coimbatour, and other provs., its cultivation is very extensive, and the berry, when properly attended to, is of a superior flavour. Of this article the East India company in 1834 imported into the United Kingdom 1,560,098 lbs.—Pepper is also a valuable product of H. The gardens in which it is reared have been described as occupying the deepest glens, shaded by mountains and dense forests, and as appearing only like specks in the wilderness by which they are surrounded. The imports from the East of pepper amounted in 1827 and 1828 to 14,045,868 lbs.; in 1845, 9,042,944 lbs.; but a small proportion only of this was the native produce of H.—The quantity of tobacco raised in India, though not an indigenous plant, is enormous. It was introduced after its discovery in America, and the fasci-

nating power of this leaf has brought it into general use among the Hindus, who cultivate it in every quarter. Were the duty upon it in England lowered, large quantities might be obtained from the rich soils of the East. Snuff made of the tobacco of Masulipatam is highly prized in this country. It was at one time supposed that the tobacco plant was indigenous in India; but Major Rennell has shown that this notion is erroneous; as there are in existence proclamations issued by the Mogul emperors, especially one by the Emperor Jehangire, in the beginning of the 17th cent., in which tobacco is mentioned as “a pernicious plant, introduced by Europeans.” Besides the names by which it is known in H., even the Sanscrit names do not occur in old writings, and are evidently corruptions from the European term. Tobacco is now cultivated in almost every part of H., especially in the N and W provs. of the presidency of Bengal, in Malwah, the Northern Circars, &c. In the S provs. it is not so commonly grown. The district round Bilsah, in the prov. of Malwah, is highly celebrated all over India for the excellent quality of its tobacco. The tobacco grown in the Rungpur district of Bengal, though by no means equal to that of Bilsah, is likewise of good quality, and remarkably cheap. In the vicinity of Baroach in Gujerat, tobacco must be a productive crop, as a begah of land planted with it yielded a net revenue to government of 20 rupees; whereas, according to Mr. Tennant, in the N and E provs. of the presidency of Bengal, “between 16 and 20 maunds of tobacco are reckoned a medium produce from 3 begahs,” and the value of each maund is only a rupee. Very rich lands produce about 160 lbs. per acre of the green leaf.

*Culture of Cotton.*] There is no doubt that India produces abundance of cotton. Its millions of inhabitants are clothed in home-grown cotton,—in the hot weather in calico and muslins,—in the winter in cotton-padded coats. Instead of blankets they cover themselves with quilts; and in place of doors and glazed windows they hang up curtains padded with cotton; while tents and tent ropes, covered carriages, the housings of elephants and of horses, are all made of cotton cloth, besides its being applied to a variety of other purposes, all indicating a very large production of this necessary of life, in addition to the surplus provided for export to this country and to China. At present the native consumption of cotton in India may be estimated at 1,500,000,000 lbs. annually. If each village that now grows cotton were to increase its cultivation to a small extent, its supply would, even in a single season, be enormously increased. Much of it is good enough for all purposes, but some is short in staple and rough in texture, probably from being grown in very dry situations. It has often been disputed whether the “wels of woven air,” for which the natives of Dacca were once so famous, owed their beauty to the fineness of finger or the superior quality of their cotton: something probably was due to both; but Mr. F. C. Brown assures us that the species of cotton from which these muslins were fabricated, and which had grown immemorially on the rich banks of the Megna, has become extinct with the manufacture itself. A good deal of what is now known as Surat cotton is of excellent quality; but there is reason to believe that this is produced in Central India, and reaches Surat by a circuitous route. The American planters describe the cotton of Unrawutti, near Nagpur, as fine in quality and long in staple, and the cotton of Central India in general as excellent cotton, and requiring only to be properly picked and carefully cleaned. The produce of cotton per acre in India is only about 100 lbs.; in America it is 400 lbs. India is a coun-

try of such vast extent, and so diversified in soil and climate, that the culture suited to one part is sure to fail in another, unless corresponding differences in treatment are adopted. Thus, in the NW provs. of Bengal very fair native cotton is grown, and a very good return per acre is obtained; but there the American cotton plant did not succeed well, apparently owing to two very dry seasons, when rain fell for only about six weeks, instead of, as usual, for three months. In the moist and rich parts of Bengal the American plants run too much into leaf. This might no doubt be obviated by variation in culture, but the insects are unfortunately also very destructive to the American cotton; but even here some varieties of cotton, either indigenous or exotic, may be found suitable to the soil and climate. In the Madras presidency the experiments at Coimbatour—which is far from a favourable situation for American cotton—have been proceeding successfully, for the cultivation has been going on for some years with the acclimated American seed, and the cotton remains of good quality. But none of these sites are within what is considered the true cotton district of India; that is the country above the Ghauts, as the Mahratta country, the Deccan, Candeish, Nagpur, Hyderabad, all not unfrequently comprehended in the term Central India. There the elevation of the table-land, with the modifying influence of the several ranges of mountains, produces a peculiarity of climate which is equally removed from the excessive moisture of Bengal, or the parching drought of Northern India. With a favourable climate, there is also abundance of the excellent cotton soil of India; and hence the cotton culture has extended almost of itself, and will go on extending in proportion to the encouragement given by the capital and energy of European merchants. The natives of India are well known to be careless in the picking, the cleaning, and packing of their cotton. The Indian cotton, however, has many good qualities, and would be employed by our manufacturers to a much greater extent if it were supplied in a clean state in large quantities. The application of the American gin by Americans to the cleaning of Indian cotton has been completely successful at Coimbatour, at Dharwar, and at Baroach; and the cotton has sold in the Liverpool market at nearly the price of New Orleans cotton. The average export per ann. of cotton from India, during the five years ending 1841-2, was to Great Britain 66,125,966 lbs., and to China 452,795,315 lbs. In 1825 only 39,567 bales were imported into this country; in 1844 no less than 239,718 bales. Some of this cotton was from districts where no cotton was cultivated for exportation a few years since. Mr. Chapman, in a recently published pamphlet on the *Cotton and Commerce of India*, gives it as his opinion, that out of the 480,000,000 lbs. of cotton which we have annually imported, 360,000,000 lbs. were of a quality which India might furnish.

*Culture of Tea.*] In addition to the exertions making in India for the improvement of the quality of cotton, by the introduction of American and other seeds, experiments to some extent are in progress to increase the growth of tea, coffee, timber, and other necessary articles of consumption, as much for the benefit of the natives themselves, as for a source of profit by exportation to foreign countries. These experiments have been undertaken by the sanction and with the assistance of the East India company, and generally have proved successful. The Hindus are proverbially slow in adopting new customs, especially as regards any article of food or refreshment, yet in the course of a very few years, tobacco and potatoes, which heretofore had been completely unknown, are now both extensively cultivated and

largely consumed by them. With the intention of spreading civilization still further by the use of what have hitherto been deemed luxuries, the growth of other articles of a similar kind is progressing, and in addition to the prov. of Assam, in which tea has been so successfully introduced as not only to supply a part of India itself, but also to furnish shipments to this country, it has also been successfully planted in Kumaon and Gurhwal. Plantations have been formed at various elevations beyond the level of the sea, subject to considerable variation in the temp., some in parts where snow seldom falls, but where the frosts are sometimes severe; and in others annually exposed both to frost and snow. See articles ASSAM and KUMAON.

*Implements of husbandry.*] The plough used throughout all India is as rude and imperfect an instrument as can well be conceived. It consists simply of two or three pieces of wood clumsily united; or of a piece of crooked stick, with nothing resembling or serving the purposes of a coulter or mould-board. It is so extremely light, that a Hindu, a man of no muscular strength, can easily carry it on his shoulder to the field. In Bengal, and generally in H. Proper, it is drawn by a yoke of oxen guided by the ploughman himself. These, however, work only part of the day, as there are always two or three pair of oxen assigned to each plough. In some parts of Orissa the women are seen holding the plough, and the female children driving the oxen. Where the same person performs both operations, he generally holds the plough with one hand—for it has but one stilt or handle—and occasionally pulls the tails of the oxen with the other. A pair of oxen may be purchased for 6 or 8 rupees, a plough for five-tenths of a rupee, and a yoke for one-fourth. In H. Proper it is calculated that a man and two oxen can plough a beegah of land several times in the course of the day; and in the S of India, that 12½ acres of watered land, and 25 acres of dry land, require 5 ploughs. Where it is necessary to plough the ground to a considerable depth, several ploughs follow one another; but even then, unless the soil is very loose and friable, they do not penetrate far, and the field remains full of dirt and rubbish. The second ploughing, where only three or four are given, is generally across, and the third in a diagonal direction. The harrow is, if possible, a more imperfect implement than the plough: it is simply a bough broken from the nearest tree. The roller is a ladder about 18 ft. in length, drawn by two bullocks, and guided by two men, who stand upon it to increase its weight. In most parts of H. there are two *hulcaries* or ploughing seasons, viz., after the setting in of the rains in June, and after they cease in October. The wages of a ploughman are 5 seers of the grain which is in cultivation, and 2 rupees, for each ploughing season. The wages of the other country-labourers are 5 seers of grain, and a 25th sheaf during harvest. The *hackery*, an ill-constructed and clumsy two-wheeled cart, is used by the ryots of Bengal for some purposes on their farms, where they have not an opportunity of water-carriage; but for heavy burdens to be carried to any considerable distance, oxen and bullocks are most commonly used. Mr. Chapman remarks: "Whatever improvements in culture may be devised, it is clear that they cannot be carried into effect without the aid of appropriate artisans. That improved implements are not without effect in India, may be gathered from the conduct of the cultivators in a district near Nussick, who having been persuaded, with much ado, to try a Scotch plough, were so impressed with its superiority that they painted it red, set it up in one of their villages, and worshipped it! The habits and performances of the workmen in the dock-yard of Bombay, as well as other facts, show clearly that the natives of India are capable of becoming clever and efficient artisans, but nothing can be more deplorable than the present capabilities of the generality of village workmen. As to supply of material, I found that at Ortur, a town of about 8,000 inhabitants, the six or eight smiths in the place must join their stocks of iron on the occurrence of a job wanting 8 or 10 lbs. of it; yet English iron is not dear there. In the same town I was credibly informed there are not half-a-dozen pairs of scissors. At Murr, a small market-town in a Ghaut district, when I wanted what I may term an iron yard-band, the smith had to send to Jooneer, 8 m. off, for the material; and here I attempted in vain to get done little jobs of the commonest kind. From inquiries made at Allep, I found reason to conclude that not more iron is annually consumed in the cultivation of 100 acres of land in India than in that of a single acre in England. In those districts, as indeed I believe in all Western India, English tools are used; if a file or chisel be disabled, a new one is not to be had nearer than Poona, 60 m. off. As to works for lifting water, grinding corn, &c., I do not believe that in all Western and Central India, except perhaps near Bombay, there is such a thing as a pump, a water-mill, or a wind-mill."

*Manufactures.*] Of all the various manufactures carried on in India, that of cotton claims our first notice, on account of its antiquity, of its being the staple and most common manufacture of the country, and of the variety of the fabrics which it pro-

duces. It is estimated that cotton-goods to the value of £20,000,000 a-year are manufactured in British India; and to the value of £20,000,000 per ann. in the tributary states. The perfection to which the natives are known, from the most remote times, to have carried the cotton manufacture, must be mainly attributed to the circumstance, that every distinct kind of cloth is the produce of a particular district, in which the mode of manufacturing it has been transmitted for centuries from father to son. The prov. of Bengal, and the E side of the Peninsula, are the principal seats of the cotton manufacture. The vicinity of Simoga, a town in the Mysore rajah's dominions, 122 m. NW of Seringapatam, is the limit of the manufacture of cotton to the westward, in this part of India; and, with the exception of a particular kind of chintz made at Puna, and painted with gold and silver, there are as fine cotton cloths made on the W side of the Peninsula. On the E side, the Madras investment of cotton piece-goods for the East India company was always provided from the district between Cape Comorin and Ganjam in the Northern circars, a distance of about 1,500 m., and principally in the Northern circars. In Bengal this manufacture, in almost all its branches, still flourishes. It also extends into the provs. of Oude, Allahabad, particularly the Benares district, Bahar, and Orissa. Coarse cotton cloth is manufactured in different parts of the prov. of Agra. In the centre of the Doab there is a very coarse and common article made, which is dyed red with cheap materials. The coarsest sort of blue handkerchiefs are manufactured near Calcutta. The cotton goods made, in the more southern parts of India in general are not coarse, though there are goods of this description manufactured in the Northern circars, both to the N and S of the Godavery. There is also a manufacture of coarse cotton cloths at Arcot. Dacca, in the E quarter of Bengal, was long celebrated for the manufacture of the finest muslins. In this district there is or was grown a kind of cotton called *banga*, which, though not of a very superior quality, was necessary to form the stripes of such muslins; and this circumstance may have contributed to the perfection of the fabric. Before the fall of the imperial government, the delicate and beautiful fabrics of Dacca were held in such estimation, not only at the court of the emperor, but amongst all the higher orders of the nobility in India, as to render it a matter of difficulty to supply the demand for them. Plain muslins of an inferior quality, as well as flowered, striped, and checkered muslins, are still manufactured in the district of Dacca, and in the N parts of Benares. The manufacture of muslins in pieces, chiefly for turbans, is carried on to a great extent in the Cuttack district of Orissa. Dimities of various kinds and patterns, and cloths resembling diaper and damask linen, are made at Dacca, Patna, Taunda, and other places. Chintzes are manufactured principally in the district of Benares, and in the country around Patna and Calcutta; in H. Proper; and at Masulipatam in the S of India. Masulipatam and Madras were also celebrated for their palampores, the ground-work of which is formed of the plain long cloth chiefly wrought in the island of Nagur and its vicinity.

The manufacture of silk next claims our notice. Though the Romans procured their silk from China, and were obliged to depend upon the Persians for a supply of it, there is little doubt that, at that period, it was manufactured in H. In the Sanscrit there are names for the silk-worm and for manufactured silk; and, what is more decisive on this point, there appear to have been from the remotest times two castes of Hindus, whose respective employments

were the feeding of silk-worms and the spinning of silk. In 1762, when the power of the East India company was pretty firmly established in H. Proper, they sent over some natives of Italy to introduce the Italian mode of spinning; but the first attempt to establish a silk manufacture, a little below Calcutta, did not succeed. In 1773, buildings for that purpose were erected at Junjipur, in Bengal, and in 1803, about 3,000 people were employed here. This is still a great silk station. At Cossimbazar, Mauldah, Bauleah, Commercolly, Radnagar, and Rungpur, all in the district of Rajshy, silk goods are made. The raising of silk-worms is principally confined to a part of the district of Burdwan, and to the vicinity of the Bhagiratti and Great Ganges, from the fork of these rivers, for about 100 m. down their streams. The introduction of the silk-worm has not yet succeeded in the warmer districts. The mulberry-tree, used for feeding the worms is the Oriental; the dryness of the soil, it is supposed, is prejudicial to the China mulberry. Wild silk-worms are common in the forests of Silhet, Assam, and the Deccan; and from them a kind of coarse silk, called *tisser*, is procured, which is far inferior in colour and lustre to the other silk. The most extensive and flourishing manufacture of wove silks is at Murshedabad and at Ahmedabad. Here are also made various kinds of taffetas, plain and flowered, brocades of silk and gold, and other sorts of silk goods both for home-consumption and exportation. The annual value of the brocades made for home-consumption at Ahmedabad is 40,000 rupees; of these exported, 300,000 r. In the district of Benares, tissues, brocades, and ornamented gauzes are manufactured; in the W and S parts of Bengal, plain gauzes, principally for home-consumption; and mixed goods of silk and cotton, at Mauldah, Boglipur, and in some parts of the district of Burdwan. Though the silk-worm has not been introduced into the Carnatic, and probably would not thrive there, yet in this prov. the silk-weavers make goods of a very strong fabric.

The other manufactures of H. are not of great extent or value, and may therefore be noticed in a more cursory manner. In all the colder parts of H., particularly in the elevated districts of the Mysore, the natives wear woollen cloths called *comelies*. These are worn as they come from the loom, and are of different lengths; some being 6 or 7 ft. long, by 4 or 5 ft. broad; others of a finer texture, are about 10 ft. long, by 6 or 7 ft. broad. Neither of the kinds are dyed, but are of the natural colour of the wool, which, in the fine ones, is almost always a good black; the price of the coarser kind is from 1s. 6d. to 2s., of the finer from 12s. to 15s. The Chitteldrug district of Mysore is celebrated for this manufacture. Flannels well woven, but fulled in a very imperfect manner, are manufactured at Patna. Carpeting of a very durable fabric is made in the Churrah district of Allahabad; and Ellore, the capital of one of the Northern Circars of the same name, is famous for carpets of a rich and beautiful texture.—The best coir cables are made at Anjengo and Cochín, of the fibres of the Laccadive cocoa nut.—Canvass is manufactured from cotton and from the sun hemp; the former in the neighbourhood of Chittagong, Patna, and some other places, and the latter at Calcutta. It is of the same length, breadth, and weight, as English canvass; and has a dross upon it which is removed by bleaching and washing. Pack thread is woven into sackcloth in many places, particularly in the N parts of Bengal, where it is used as clothing by the mountaineers. A coarse, but very strong sackcloth, is also made at Bangalore, in the Mysore, from the Indian hemp. The annual export of



*gunnies*, or coarse sacking, amounted in 1835-6 to  $2\frac{1}{2}$  lacs of rupees; it now exceeds 13 lacs in value.—Saddles, harness, military accoutrements, and other articles of leather, are manufactured by the natives in Bengal. Leather gloves are made at Madras, and shoes all over India. Hyderabad, the capital of Sind, is noted for its artificers who embroider on leather.—Brazen water-pots are manufactured at Bareilly in the prov. of Delhi. Articles of cutlery, and even brass instruments, are made in some parts of India in tolerable perfection. The swords made in the Deccan, and in the N part of India, are equal to the best swords made in any other part of the world. The armourers of Hyderabad, in Sind, are celebrated for the excellence of their workmanship.—At Mutedon, in the Mysore rajah's dominions, glass is manufactured which is used for making the rings which are worn by the Hindu women round their wrists. It is made of five colours, black, green, red, blue, and yellow: the black is in the most request, and bears the highest price. The natives obtain the soda used in this manufacture in the fields, where it forms, by a natural process, during the hot season. The same fields supply them with sand. The ring makers on the W side of India purchase the greater part of this glass. Vizagapatam is celebrated for its beautiful cabinet work, which is painted and inlaid with ivory and black wood with great elegance and art.

The manufacture of opium and indigo have already been mentioned.—About forty years ago, the cochineal insect was introduced into India; and cochineal, though of an inferior kind, is now produced in different parts of India. The insect is found to thrive best on the indigenous opuntia, which is abundant in Bengal, and in most parts of India.—Tar is extracted from teakwood in most of the places where ships are built of it.—Rose-water is distilled in many parts. Gazipore, in the Benares district, has long been celebrated for it.—Paper is manufactured in some parts of Northern H. from the bark of a tree named *deah*. It is very strong, and capable of being woven, when gilt, into the texture of silks and satins.—Saltpetre is manufactured to a great extent in the provs. of Bengal and Bahar, particularly in the latter. The climate and soil are extremely favourable to its spontaneous production. It is sent to Europe in an impure state, but crystallized, put up in bags, each bag containing two bazar maunds, or about 164 lbs.. The total export to England is from 8,000 to 10,000 tons per ann.—Salt is made from sea water along nearly the whole of the E coast, as far as the mouth of the Ganges, in great abundance. Tumlock and Hijeli, which lie to the SW of Calcutta, are the principal places where salt is manufactured for the Bengal presidency. On the W coast of India, salt is made in large quantities on the coast of the island of Salsette. The process is similar to that which is followed in Europe; but when salt of a superior quality is wished for, it is obtained “by fixing a jagged piece of stick in the water, when first let into the reservoirs, to which, as the water evaporates, saline particles adhere, to the weight of 3 or 4 ounces.”

The mechanism of the Hindus is very rude and imperfect, and probably has been stationary for at least 2,000 years. The native rice-mill still consists of two round flat stones; in the lower one of which there is a hollow, into which the middle of the upper one is inserted. It is turned round by means of a wooden peg, and the flour comes out through a groove in the under stone. It is in fact the *quern* of Scotland. Two Indians with their hand corn-mill can grind only 60 lbs. of flour in a day. On several of the streams, however, in H. Proper, there are

water-mills for grinding corn. The mill that is used to extract the oil from the cocoa nut is very simple in its construction, and, at the same time, answers its purpose extremely well. “The Indian carpenter knows no other tools than the plane, chisel, the wimbol, a hammer, and a kind of hatchet. The earth serves him for a shopboard, and his foot for a hold-fast; but they are a month in performing what our workmen will do in three days. The sawyer places his wood between two joists fixed in the ground; and, sitting carefully on a little bench, employs three days, with one saw, to make a plank which would take our people an hour's work. The blacksmith always carries his tools with him, his forge, and his little furnace; working wherever he is employed. He sets up his forge before the house of the person who calls him, and, with the dirt of the place makes a little wall, before which he places his hearth. Behind the wall are two leather bellows, which the apprentice keeps going, by alternately pressing the top. A stone serves for an anvil; and his whole apparatus consists of a pair of pincers, a hammer, a mallet, and a file. The productions of the goldsmith announce, in every shape, the want of tools. Like the Chinese, they have not as yet arrived at the art of polishing gold or silver, or to work the gold in different colours. The Indian goldsmith carries his workshop with him wherever he is sent for. His furnace is an earthen pot; an iron pipe serves him for a bellows; and a pair of pincers, a hammer, a file, and a small mallet, are all his tools. He makes his crucible on the spot, with clay mixed with charcoal and cow dung. About 1s. are the wages of the master and his servant for a whole day. The shoemaker is of the most despicable caste, and is also the poorest of all the artisans. He has no other tools than an awl and a knife. When a pair of shoes are wanted, the money must be advanced; and with this money he buys a sheepskin, which he prepares on the same day, and on the morrow brings the shoes.” [*Sonnerat*]. In a recent paper on the raw products and manufactured articles of India, Dr. Royle makes the following interesting remarks: “India, vast in extent and diversified in surface, is remarkable as the cradle of one at least of the nations who earliest practised the arts and cultivated the sciences which characterize civilization, and from whence these travelled to the West, and perhaps also to the East. Its present inhabitants continue to venerate sciences which they know only by name, and to practise arts of which they know not the principles, and this with a skill not only remarkable for the early period at which it attained perfection, but also for the manner in which it has remained stationary for so many ages. This can be explained only by the fact that the son was unable to add to the manual dexterity of the father, and could not improve an art which he knew only as a routine process. But when commerce was in its infancy, or dealt only in the most precious commodities, these arts could not have been practised unless India had contained, within itself all the raw materials which art could convert into useful articles or elegant ornaments. Without cotton the so-called ‘webs of woven air’ could have had no existence. Without numerous barks, woods, and flowers, dyeing could not have been practised, and calico-printing would probably not have been invented. If an *Indigofera* had not been indigenous, indigo would never have derived its name from India, nor have afforded us the proof, in the stripe of mummy-cloth, of the early commercial intercourse between its native country and Egypt. Neither would sugar have been arranged by the Greeks with honeys, nor the Indians described as those who *bibunt tenera dulces ab arum*—”

*dine succos*, unless they had had the cane-like *Saccharum* as a plant of their country. Neither in Persia under the proverb of 'giving an Indian answer' have been considered equivalent to a cut with an Indian sword, unless the Hindus had possessed the ore which enabled them to manufacture their far-famed wootz steel; and gunpowder is likely to have been invented at an early age only in a country where 'villanous saltpetre' is abundant. Besides these, India possesses an immense number both of animal and of vegetable, as well as of mineral substances, well fitted for arts and manufactures of every kind; and the country has often been described as capable of producing within its own limits almost all the useful products of every other quarter of the globe. As India produced the raw material and manufactured it into a costly article, gold and silver have from the earliest times been required to purchase this combination of the gifts of nature with the creations of art; but mechanical invention has deprived the Hindus of many of the advantages of their position, and they have in a great measure lost the commerce which they had themselves created, especially as some of their products were subjected to discriminating duties, which amounted to a prohibition on import into this country. Hence their foreign commerce has not advanced, as might have been anticipated from the enjoyment in many parts of long-continued peace. But fashion, which here is as fickle as the wind, is in the East as steady as their monsoons, and has fortunately preserved some of their manufactures in their pristine excellence, and which, in any general collection of manufactures, would enable those of India still to hold a conspicuous place. For instance, though the muslins of *Dacca* may not now be produced of as fine a quality as formerly, those of *Chunderree* are still highly esteemed by the natives of rank and wealth. So the embroidered muslins of *Dacca*, the brocades of *Benares*, and the worked shawls of *Delhi*, will bear comparison with any other goods. The shawls of *Cashmere* still remain unrivalled. The workers in gold and in silver still produce chains of matchless beauty, and their filagree work displays that delicacy of hand for which the Hindus have so long been famous. The wootz steel, the various arms, the works in copper and brass, and in the different little known metallurgic compounds, the inlaid metals, and the endless variety of images, display many instances of ingenuity and skill."

*Internal trade.*] The internal trade of India is conducted by boats, land-carriers, travelling merchants, and at fairs. The boats which are used on the *Ganges* and its tributary streams are of various sizes and constructions; from *Patna* to *Calcutta*, where the navigation resembles that of the sea, both from the width of the river and the storms which frequently arise, it is necessary to employ large and strong boats, or rather ships of upwards of 100 tons. In the higher parts of the river, the boats are made either low and deep, or flat and *clinker built*. Between *Calcutta* and the sea, among the shallows, the boats are made without keel. Those which are used in the *Indus* are flat-bottomed, with square heads and sterns, low forward, high abaft, and drawing only a few inches water; oars are seldom employed, but they are either dragged by men or pushed along with poles; when the wind admits it, sails are used. The materials of which these boats are constructed are very few, simple, and cheap; and the boatmen scarcely receive any wages except what will purchase them a little salt, tobacco, and clothing; grain is supplied them for food. By the inland navigation in *H. Proper*, salt, grain, cotton, and manufactured articles, are interchanged. It is said that the whole

number of boatmen employed on the rivers of *Bengal* and *Bahar* are nearly 300,000; most of these are also labourers in husbandry, or fishermen. See articles *BENGAL*, *GANGES*, *INDUS*.—Land-carriage is performed by oxen, buffaloes, and sometimes by horses; carriages are seldom used, there being no roads adapted for them. The owners of the cattle are generally the owners also of the merchandise they carry, as well as the drivers. One driver is allowed to four oxen. Their food is generally obtained without expense on the road-side; but where buffaloes are employed, it is necessary to give them grain. The articles of merchandise which are thus transported are grain, salt, cotton, sugar, tobacco, betel-nut, &c. In the *Deccan* there is a wandering tribe of carriers, called *Lomballies* or *Burgarabs*, who interchange the commodities of this part of *H.* for those of *Bengal* and the adjacent provs. There are also in the *Mahratta* countries and other parts of *India*, *Vanjaries* or itinerant grain-dealers,—a singular race of people. They travel in large parties, with their grain on bullocks, brought from a great distance; but they do not depend entirely on their profits as grain-dealers, nor on their returns of merchandise, for they occasionally become stationary, and apply themselves to husbandry. The *Banians* or travelling merchants resemble the chapmen in *Britain*, they come in great numbers from *Gujerat* to *Bombay*, selling muslins, cotton cloths, &c. They are chiefly *Hindus*, though some *Mahommedans* adopt the name and the profession. They are distinguished by a red turban, shaped in front like the horn of a rhinoceros. The *banyans* are generally rich, and carry on a stationary as well as an itinerant business. When travelling they are attended by coolies or porters, to carry their merchandise. Besides these there are the *Borahs* or petty chapmen, who travel about the country with a variety of small and cheap articles in their boxes. The principal carriers between *India* and *Cabul* are the *Lohanis*, a tribe located between *Ghuzni* eastward to the *Indus*. They import calicoes, muslins, chintzes, shawls, brocades, and spices.

*Markets and fairs.*] There are weekly markets over most part of *H. Proper*, but they are not common in other parts of *India*. At these there is a considerable interchange of commodities. The most celebrated fairs are those of *Kulu*, *Hurdwar*, and *Nolueky-Hant*. The fair of *Kulu*, in the prov. of *Orissa*, is attended by the traders from the inland parts of *H.*, particularly those of *Berar*, and traders in salt and European commodities from the sea-coast. During the months of *January*, *February*, and *March*, the former arrange their caravans, and bring their merchandise, which consists chiefly of cotton, on bullocks to *Kulu*. Here they are met by the traders from the sea-coast. Factors are employed to transact the business among them, and they also supply them with huts, food, and other necessities, during their abode. The commission of the factors is 1 per cent. Nearly all the business is carried on by factors. The fair breaks up about a month before the commencement of the rainy season. The traders then depart, but the factors are stationary.—The common fair at *Hurdwar*, the place where the *Ganges* enters *H.*, is held annually; but every 12 years there is a fair here at which are assembled a much greater number of people than at any other fair in the world. Many of these, indeed, perhaps the largest portion of them, visit *Hurdwar* from motives of superstition, and as a place of pilgrimage; but great numbers are also led hither from commercial motives. At the annual fairs it is computed that between 200,000 and 300,000 people are collected. At the great fair every twelfth year, there are often 1,000,000. In *April 1809*, it is supposed

there were assembled at Hurdwar, from every part of H., from the confines of China to those of Persia. Hindus of every description, amounting to 2,000,000 of persons. An immense variety of articles are sold at this fair. Cabul, Candahar, Multan, and the Punjab, supply horses, mules, camels, tobacco, anti-mony, assafoetida, and dried fruits of all kinds. Cashmere, and the country of the Sikhs, send shawls and other goods of that description. Spotted turbans, looking-glasses, toys, with various manufactures in brass and ivory, are supplied from Jeypur; shields from Rohilcund, Lucknow and Silhit; bows and arrows from Multan and the Doab; rock-salt from Lahore; baftas and piece goods from the Punjab; and cotton and woollen goods, cocoa-nuts, &c., from the lower provs. The most frequented place in the fair is the bed of the river,—for at this season of the year it is almost dry. The bargains are conducted and settled without a single word being spoken. A cloth being thrown over the hands of the parties, they communicate with each other by touching the different joints of the fingers, and thus effectually prevent those near them from gaining any information. Before the British gained possession of this part of H., heavy duties were levied on the cattle brought to this fair; but these are now taken off; neither are there any of those scenes of tumult and bloodshed, which formerly always disgraced it. The fair at Nalucky-Hant, in the pergunnah of Bowal, in the Dacca district of Bengal, is held annually for the space of nine days. Here the weavers assemble to purchase their annual stock of trade; and it is computed that the business carried on there frequently amounts in value to three lacs of rupees. There is a great deal of carrying trade between the Deccan and Bengal, and generally between the countries below and above the Ghauts. The manner in which the internal commerce appears to have been originally carried on, and which, if a great measure, still continues, is at *hauts*, or open markets. These *hauts* are held on certain days only, and are resorted to by petty vendors and traders, who wish to buy and sell by retail. They are usually established in open plains, where a flag is erected, to the vicinity of which the farmer, the mechanic, and the fisherman, bring their various commodities. The ground is divided into several plots, or what is in Scotland called 'stands,' and each plot is occupied by one or more vendors. The business is conducted in a manner similar to our fairs, only a police-officer attends to preserve the peace; formerly duties or customs were levied by the proprietors of the lands on which these fairs were held; but these are now pretty generally abolished.

**Roads.]** The Grand Trunk road from Calcutta, the main artery of communication throughout Bengal and H., extends 770 m., with a general breadth of 30 ft., increased in some places to 40 ft. The road from Puri to Bissenpore, which connects Orissa with Bengal, and which is commonly known as the Jugurnath-road, is held to be of the next importance. A road from Sylhet to Gowhatti, the capital of Assam, across the Cassia hills, is in active preparation. The Deccan road from Mirzapore to Jubbulpore, a distance of 239 m., commenced in 1824, has been completed lately. Another road, small in point of expense, but of great importance, has been made from the E frontier of Bengal, through Cachar, and across the Manipore hills to the limits of the Burmese empire. Besides these roads, which are stated to be the most prominent, a variety of district roads have added greatly to the local convenience of the people, and have proportionately occupied attention. A toll on a road is unknown in India. Mr. Chapman, in his recent pamphlet on the Cotton and Commerce of India, undertakes to demonstrate, by well-arranged facts and tables, that the export of cotton from India to England has risen exactly as the difficulties or expense of its transmission have been diminished, and also that costs and impediments still remain which are sufficient to account for the smallness of the quantity we continue to receive. He next shows that what holds good of India holds good also everywhere else. Those countries whose populations approach most nearly in their characteristics to those of India, depend for commerce upon their relative condition with regard to facilities of transit to the interior. Mexico,

Central America, and Ecuador present striking instances of the evils resulting from their deficiency. The way in which the trade of tropical countries, whose inhabitants in the mass are certainly not superior in industry or in their desire for European manufactures to the natives of India, has increased with every extension of means of communication, he argues affords a lesson of the most encouraging character. While it is pointed out that each individual in South America, including Spaniards, Portuguese, mixed classes, Indians, and slaves, takes from us eight times as much in manufactures as each inhabitant of India, it is contended that this disparity is removable, and that roads and railways might, in an incredibly short time, heget an exchange of produce for manufactures which, as a rise of the Indian demand to the level of the South American, would augment our exports to that country from £6,000,000 to £48,000,000, and would only be limited by our own capabilities of meeting it.

**Railways.]** India presents peculiar and general fitness for a connected system of railroads. At present, according to Major Kennedy, it costs 22 days' hard work to reach Umballah from Calcutta, a distance of 1,000 m., a good railway train at a moderate speed would accomplish the distance in 40 hours, and save £10 a-ton on heavy goods. The time that heavy goods require to make the same journey by the present conveyances of the country is from two to three months, at a cost of £12 to £15 per ton. Whilst, if a train existed, they would be conveyed this distance in 48 hours at a cost of £4 to £5 per ton. The cost to a traveller making this journey, by the present covered conveyances, in 22 days, cannot be less than from £50 to £70. By the train it ought to be done within 40 hours, for less than £6 cost. It is difficult to estimate the increase of mercantile and industrial activity in all its ramifications which must follow the establishment of a good railway system in India. The following great railways are projected in our Indian empire:—The East Indian railway, which is intended to proceed from a station on the western bank of the Hugli, opposite the town of Calcutta, by Burdwan to Mirzapore, with provisions for the collection of the intermediate traffic, and such future extension as circumstances may render expedient.—The Great Western railway of Bengal, which is to proceed from Calcutta along the E bank of the Hugli, which river it will cross at Chogda, 30 m. above Calcutta, and thence pass by Burdwan, Ranigunge, Serampore, and Behar, to Patna and Dinapur. A branch-extension of the first part of the line from Calcutta to Chogda is projected from the latter place along the E branch of the Hugli, by Kishungur and Murshedabad, to the junction of the Hugli with the Ganges, a distance from Chogda of about 120 m.—A line from Madras to Wallajungur, about 83 m. from Madras, and the emporium of traffic for the surrounding districts. This line admits of ready extension about the S parts of the Peninsula.—From Bombay, the great emporium of trade and shipping on the W coast of India, the Great Indian Peninsular railway company have projected a line to proceed across the peninsula to Coringa, situate at the mouth of the Godavari, and offering the most commodious harbour on the E coast. From this main line convenient branches might extend, so as to collect the great staple traffic coming from Central India on the N, and the districts about Hyderabad on the S. At present this line seems only destined to lead from Bombay to Calian, and thence perhaps to the Malsei ghaut. Colonel Grant strenuously urges its being pushed forward to Punnah, the cap. of the Deccan, and in the direct line to Ahmednuggur, the S. Mahratta country, the Madras presidency, the Nizam's dominions, and the Calcutta dawk line. See PUNAH.

**Commerce.]** The commerce of India may be considered under two grand heads: viz., that which is carried on with Europe and America; and the coasting-trade, or that which is carried on from one part of India to another; and from India to the ports of the Indian islands, China, the Arabian and Persian gulfs, and the E coast of Africa. The Indian commerce with Europe is almost entirely carried on by Great Britain; and, till within these few years, it exclusively consisted of the commerce of the East India company. That which was called 'the privilege trade,' was established by an act of parliament in 1793, by which the Company were empowered to grant licences to individuals to trade to India; and 'the private trade' was that enjoyed, under certain stringent regulations, by the commanders and officers of the Company's ships. Since the trade to India was thrown open, a large capital and amount of tonnage have been embarked in it by individuals.

**History of the Company's charter.]** The first association for prosecuting trade between England and India was formed in London in 1599. Its capital was divided into 101 shares, and amounted to £30,000. On the 31st of December, in the following year, this association procured a charter to last for fifteen years, and constituting the adventurers a body politic and corporate, by the name of 'The Governor and Company of Merchants of London trading to the East Indies.' In the prosecution of their object, five ships were provided, which sailed from Torbay on the



2d of May, 1601, with cargoes of bullion and merchandise. The result of this expedition was encouraging; and eight other voyages were performed between 1603 and 1613. The clear profits in the trade varied in the other seasons from 100 to 200 per cent. upon the capital employed.—In 1609, the Company obtained a renewal of its charter for an indefinite period, subject, however, to its being dissolved by government upon three years' notice being given. About two years after this time, permission was granted to the Company to establish factories at Surat, Ahmedabad, Cambaya, and Goga, upon its agreeing to pay a duty of 3½ per cent. upon all shipments of merchandise. The system of subscriptions, in order to provide the funds needed for the prosecution of each voyage, was discontinued in 1612, when the association assumed the character of a joint-stock company. Capital was now raised amounting to £429,000, which was embarked in four separate adventures or voyages. The advantages derived (87½ per cent.) were sufficiently encouraging to produce a second set of subscriptions; and, in the year 1617–18, a new fund was raised to the amount of £1,600,000.—A third joint-stock company was created in 1632, the subscriptions to which amounted to £420,700. In 1636, a license to trade with India was granted by the king to a body of adventurers wholly distinct from the existing corporation, of whose rights this was deemed to be an invasion. Both associations seem, however, to have become aware of the disadvantages resulting from competition; for in 1650 their interests were joined, and new subscriptions obtained under the denomination of The United Joint stock.

The first of those peculiar privileges to which must be ascribed the growth of the Company's political power in India, was obtained in 1652. Upon payment of a very inconsiderable sum, it obtained from the native government of Bengal an unlimited right of trading throughout the province, without being subjected to the payment of any duties. A new charter was obtained by the Company on the 3d of April, 1661, confirming its former privileges, and giving authority to make peace or war with any prince or people, "not being Christians," as well as to seize all unlicensed persons found within the limits to which its trade extended, and to send them to England. In 1668, the island of Bombay, which had been ceded by Portugal to Charles II., as part of the marriage-portion of the Princess Catherine, was granted to the Company "in free and common socage, as of the manor of East Greenwich, at an annual rent of £10 in gold, on the 30th of September in each year." In 1693, the king granted a new charter to the Company, under which it was required to augment its capital stock, then £756,000, to £1,500,000, and to export in every year British produce to the value of £100,000; but the power of the crown to grant such exclusive privileges was questioned by the commons, who passed a resolution declaring, "that it is the right of all Englishmen to trade to the East Indies, or any part of the world, unless prohibited by act of parliament." In this situation, the affairs of the Company continued till 1698, when, to obtain a charter conferring an exclusive privilege of trading to India, £2,000,000 at 8 per cent. was offered to government, by a number of subscribers, unconnected with the old company, which, to maintain its privileges, had previously offered to government £700,000 at 4 per cent. As was to be expected, the administration accepted of the larger sum, though at the higher interest; and a new company was erected, but the old company was not abolished. In 1702, by what was called an indenture tripartite, of which Queen Anne formed the third party, the two companies were in some measure united; and in 1708, they were, by act of parliament, formed into one company, under the denomination of the United Company of Merchants trading to the East Indies, and secured in the exclusive possession of the trade to the East, till the expiration of three years' notice after the 25th of March, 1726. With the issue of the new charter of the Company, its powers were distributed. All proprietors possessed of £500 stock, and assembled in general court, were invested with the supreme legislative authority; and all laws and regulations, all declarations of dividends, all grants of money, it was declared, should be made by them. The executive power was vested in 24 directors, chosen by the general court from among persons possessed of £2,000 stock. It was their duty to act under the ordinances of the proprietors, and to manage the business of routine. They had a chairman and a deputy chairman to preside in the courts. In India the Company's affairs at this time, and for a long period after, were directed by three councils, at Bombay, Madras, and Calcutta, which were generally composed of the senior servants of the Company. These officials, however, were not debarred from holding subordinate situations at the same time, and consequently uniformly distributed among themselves the most lucrative situations in their own gift.—In 1732, the Company's charter was renewed; and in 1744, when government was pressed for money, they made a proposal to lend the state £1,000,000, at 3 per cent. provided the period of their exclusive privileges were prolonged to the expiration of three years' notice from March, 1780. The offer was accepted, and the Company borrowed on their own bonds, the sum which they lent to government. By a law passed in 1753, the qualification for a vote in the court of proprietors was raised from £500 to £1,000 stock. In 1793, the act 33<sup>d</sup> Geo. III. c. 52, was passed, by which the possession of the British territories in India, together with the right of exclusive trading thither, were, under certain limitations, continued to the Company for the further term of twenty years.

The first breach in the monopoly of the East Indian trade was made, in 1813, when the Company's charter was renewed. On

this occasion the trade was thrown open to the enterprise of individuals, under certain restrictions and regulations, as specified at large in the act of the 53d Geo. III. cap. 155. By this act it was declared that the territorial acquisitions in India, with the late acquisitions on the continent of Asia, or in any island N of the equator, were to remain under the government of the East India Company for 20 years, from the 10th of April, 1814. The Company had also the exclusive monopoly for the like term of years, of the trade to and from China. But private traders, subjects of his Majesty, in the United Kingdom, were authorised to export goods to any port or place within the limits of the Company's charter, provided the return cargoes were sent to such ports only in Great Britain and Ireland as should be specified by an order of his Majesty in council. The East India directors were required to keep separate and distinct accounts of their territorial, political, and commercial affairs, which had been heretofore so amalgamated as to render it impossible, with any degree of accuracy, to ascertain the profit or loss on their trade. In the same year, the acts of the 54th of Geo. III. cap. 34, 35, and 36, made further regulations with respect to the East India trade. By the first act, British subjects were authorised to trade between the United Kingdom and the limits of the Company's charter, and to any intermediate port or place situate in N. or S. America—British colonies in America excepted—either directly or circuitously, provided they did not trade in tea, excepting also the dominions of the emperor of China. The second act allowed trade to be carried on with India, in ships not British built, until the 1st of January, 1815. The third act made various regulations with respect to duties, drawbacks, manifests, &c. These four acts of parliament regulated the whole of the trade in India, under the new system which had been established.

In 1833, the constitution of the Company was again restored and remodelled. The following is an analysis of the principal clauses of the act 3 and 4 William IV., c. 85, under which its concerns are at present administered:—

- Sec. 1.—The government of the British territories in India is continued in the hands of the Company until April, 1854. The real and personal property of the Company is held in trust for the Crown, for the service of India.
- 2.—The privileges and powers granted in 1813, and all other enactments concerning the Company, not repugnant to this new act, are to continue in force until April, 1854.
- 3.—From 22d April, 1834, the China and tea trade of the Company to cease.
- 4.—The Company to close its commercial concerns and to sell all its property not required for purposes of government.
- 9.—The debts and liabilities of the Company to be charged on the revenues of India.
- 43.—The governor-general in council is empowered to legislate for India and for all persons, whether British or native, foreigners or others.
- 44.—If the laws thus made by the governor-general are disallowed by the authorities in England, they shall be annulled by the governor-general.
- 51.—Any natural-born subject of England may proceed by sea to any part or place within the limit of the Company's charter having a custom-house establishment, and may reside thereat, or pass through to other parts of the Company's territories to reside thereat.
- 58.—Slavery to be immediately mitigated, and abolished as soon as possible.

Up to the 25th of March, 1848, India laboured under a double system of restriction. Whilst the Company retained its exclusive commercial character, all ships, except its own, were virtually prohibited from any trade with India. In 1815, the Americans were, by special treaty with our government, allowed to trade with the ports of Calcutta and Bombay. At a subsequent period, the like liberty was granted to British ships. In 1819 the privilege was ceded to Portugal, and at later dates to other countries, as the Indian government continued to charge double duties on all imports and exports in foreign bottoms, but the privilege was practically of little value, and was, in fact, used almost alone by the Americans and Portuguese. And even so lately as 1823, all native ships and English ships, except their own, were, in common with all foreign ships, obliged by the Company to pay double duties on exports, whether to foreign ports in India, or to England or any foreign country. The prohibition was some few years afterwards repealed, so far as concerned British and native ships, but the double tax on imports and exports in foreign vessels was continued until an act passed by the present governor-general in council, on the 4th of March, 1848, opened so far as the Company were concerned, the trade with India on equal terms to the ships of all nations. This act came into force on the 25th of March in the same year. But it in no way lessened the restrictions imposed by our navigation laws on the trade with India. It could still be carried on direct only in our own ships; and the 17th clause of the 8<sup>th</sup> and 9<sup>th</sup> Victoria, cap. 88, enacting that the native sailors of British India were not British seamen, still made it practically impossible for ships so manned to trade with England. In our ports Lascars were held to be, though British subjects, foreign sailors, and the ship must take another crew on board before she could clear outwards from our ports or from any port in our colonies; and as native Indian ships were British ships, and Lascars foreign sailors, our act shut these ves-

sels out from all participation in foreign trade, so that the only beyond-coast trade in which they had any part was in carrying cotton to China and rice to Mauritius, from both which places they had to return almost entirely in ballast. Lord Dalhousie's act prepared the way for India to reap the full benefit of the abolition of our navigation acts.

*Progress of Commerce.]* The following tables will illustrate the nature and progress of the commerce betwixt Great Britain and India.—The following is a statement of the amount in value of the principal articles exported from India, from 1793–4 to 1809–10 inclusive, consisting of the company's, the private and privilege trade, and the neutral and prize goods:

	Company's goods.	Private goods.	Neutral goods.
Bengal piece goods,	£14,490,378	6,980,505	108,921
Coast and Surat ditto,	11,563,923		
Saltpetre,	3,060,956	320,777	18,469
Indigo, sugar, drugs, &c.,	5,031,516	20,191,185	1,494,235
Silk,	7,014,986	1,211,081	6,455
Pepper,	3,322,835	320,777	18,469

The commerce of India, in its then two great divisions of the trade to and from Europe and America, and the coasting-trade, gave the following general return of imports and exports between 1802–3 and 1810–11:

## I. IMPORTS INTO INDIA.

	Merchandise.	Bullion.	Total.
From London, on account of the East India company,	£8,024,793	£5,551,934	£13,576,727
Ditto on account of commanders and officers,	3,895,000	225,062	4,120,062
Ditto on account of private merchants,	3,584,154	1,425,274	5,009,428
Total from London,	15,503,947	7,202,270	22,706,217
From America,	851,306	6,595,400	7,446,706
From Foreign Europe,	1,327,504	2,626,842	3,954,346
From Foreign Europe and America,	2,178,810	9,222,242	11,401,052
Total,	17,682,757	16,424,512	34,107,269

## II. EXPORTS FROM INDIA.

	Merchandise.	Bullion.	Total.
To London, on account of the East India company,	£12,320,642	£150	£12,320,792
Ditto on account of the commanders and officers,	2,990,867		2,990,867
Ditto on account of private merchants,	8,881,465	7,756	8,889,221
Total to London,	24,192,974	7,906	24,200,880
To America,	7,091,384	22,881	7,114,265
To Foreign Europe,	3,107,750	787	3,108,537
To Foreign Europe and America,	10,199,134	23,668	10,222,802
Total,	34,392,108	31,574	34,423,682

## III. COASTING TRADE OF BRITISH INDIA, INCLUDING THE COUNTRY TRADE TO CHINA.

The following table shows the value of goods and treasure entered inwards, and cleared outwards, at the custom-houses of the several ports, on an average of six years, commencing in 1802–3, and ending in 1806–7, from and to the districts and places named in the margin:

	IMPORTS.			EXPORTS.		
	Calcutta.	Madras.	Bombay and Surat.	Calcutta.	Madras.	Bombay and Surat.
	Sicca rupees.	Sicca r.	Sicca r.	Sicca r.	Sicca r.	Sicca r.
Coast of Malabar,	4,49,037	5,28,308	...	45,42,156	4,76,912	...
Northern parts of Gujerat,	...	43,438	71,77,578	...	59,650	64,65,831
Surat and adjacent villages,	...	27,811	17,02,512	...	12,525	28,64,123
Bombay,	...	7,10,850	12,98,075	...	16,78,076	15,34,670
Coast of Coromandel,	9,56,520	...	2,37,315	31,13,144	...	1,52,238
Northern Circars,	...	22,42,779	...	...	9,19,466	...
Northern div. of Carnatic,	...	5,39,252	...	...	42,574	...
Madras,	...	11,87,343	...	...	29,10,067	...
Southern div. of Carnatic,	...	5,96,366	...	...	2,77,769	...
Tanjore,	...	5,45,833	...	...	2,19,729	...
Tinnevely and Ramnad,	...	5,11,576	...	...	1,81,521	...
Malabar,	...	3,73,479	...	...	3,56,106	...
Canara,	...	1,82,225	21,14,418	...	1,41,286	8,10,807
Cochin,	...	23,442	...	...	7,966	...
Bengal,	...	33,01,830	64,91,411	...	5,22,288	4,60,311
Ceylon,	...	6,78,284	90,069	2,42,868	8,08,679	63,101
Coast of Sumatra,	4,06,827	35,064	...	4,53,542	19	...
Arabian gulf,	...	1,28,811	25,83,042	...	2,85,334	15,44,662
Persian gulf,	11,90,223	75,671	25,60,939	18,59,964	3,85,855	17,20,760
Cutch and Sind,	...	23,170	22,22,874	...	57,413	14,51,787
Bassein,	...	...	4,31,439	...	...	4,59,576
Goa and Concan,	...	2,29,039	15,93,955	...	5,50,795	45,62,281
Mahratta dominions,	...	1,48,710	...	...	1,63,434	...
Travancore,	...	73,502	...	...	15,264	...
Tranquebar,	...	4,86,365	...	...	5,62,224	...
Pegu,	3,91,118	1,80,744	1,940	1,32,148	1,35,575	2,045
Penang and Eastward,	21,15,153	13,00,373	5,91,199	25,78,257	11,68,340	2,94,494
Batavia,	34,345	1,65,406	1,84,936	1,35,147	47,701	14,097
Manilla,	3,01,709	7,31,003	...	3,30,474	2,41,490	...
China,	38,71,296	8,90,153	59,67,931	55,42,892	6,97,148	69,55,601
Various places,	2,77,446	2,45,341	4,93,450	4,16,961	2,35,975	3,03,445
Grand total,	100,73,952	162,06,168	357,43,083	193,47,553	131,61,181	296,00,929

## IV. COMPARATIVE STATEMENT OF THE VALUE OF MERCHANDISE EXPORTED FROM THE THREE PRESIDENCIES IN 1834-35 AND 1841-42.

	BENGAL.		MADRAS.		BOMBAY.	
	1834-35.	1841-42.	1834-35.	1841-42.	1834-35.	1841-42.
<i>Europe.</i>						
United Kingdom, . . .	1,81,20,607 r.	4,72,33,234 r.	27,72,653 r.	56,07,158 r.	96,76,470 r.	1,83,67,092 r.
France, . . .	27,67,258	63,69,004	1,74,658	3,88,855	1,69,099	1,24,204
Holland, . . .	...	...	200	...	...	...
Germany, . . .	...	...	...	47,292	...	...
Portugal, . . .	...	...	...	1,820	...	...
Hamburg, . . .	...	39,734	...	...	...	...
Bremen, . . .	...	98,066	...	...	...	...
Trieste, . . .	...	61,071	...	...	...	...
<i>America.</i>						
North America, . . .	18,17,854	29,90,888	65,883	10,386	1,86,004	11,385
Coast of America, . . .	...	...	...	...	...	4,20,672
Demerara, . . .	...	18,353	...	...	...	...
Berbice, . . .	...	17,061	...	...	...	...
<i>Asia.</i>						
Bengal, . . .	...	...	11,32,795	17,62,225	12,96,545	8,17,032
Bombay, . . .	...	...	61,41,927	78,30,869	...	...
Ceylon, . . .	32,410	1,17,501	15,62,062	19,21,906	66,893	1,29,516
Cutch and Sind, . . .	...	...	...	...	19,01,737	46,14,888
Goa, . . .	...	...	2,30,899	1,25,789	1,57,847	1,73,830
Coast of Coromandel, . . .	16,09,270	8,58,047	...	...	2,30,114	1,67,547
Malabar, . . .	26,68,419	28,86,914	...	...	11,18,900	17,33,298
Arabia, . . .	...	...	14,96,880	9,87,076	11,30,747	17,75,745
Arabian and Persian gulfs, . . .	9,47,738	18,43,826	8,539	1,24,808	21,10,713	41,24,898
Penang and eastwards, . . .	23,54,992	71,58,769	...	...	8,37,958	23,99,153
Malacca straits, . . .	...	...	16,41,450	17,15,605	...	...
Java, . . .	48,994	1,21,071	79,074	...	...	...
Pegu, . . .	9,37,888	19,97,509	2,95,388	2,79,159	...	...
China, . . .	1,27,07,703	98,52,011	4,04,843	12,00,904	1,56,08,551	1,77,85,022
Eastwards, . . .	...	...	22,044	28,213	...	...
Maldiv islands, . . .	42,291	43,676	24,502	29,173	...	...
Sadras, . . .	...	...	27	...	...	...
Travancore, . . .	...	...	5,895	57,804	...	...
Tranquebar, . . .	...	...	36,696	26,379	...	...
Sumatra, . . .	532	...	86,158	900	...	...
Mauritius and Bourbon, . . .	13,52,984	24,14,167	1,60,302	77,743	21,638	24,824
French Indian ports, . . .	...	...	2,82,012	2,31,835	...	...
Kurachi, . . .	...	...	...	...	...	5,69,941
<i>Africa.</i>						
Cape of Good Hope, . . .	51,885	1,49,003	1,029	1,457	32,132	...
Isle of France and Bourbon, . . .	...	...	...	...	...	...
Coast of Africa, . . .	...	...	...	...	3,12,483	...
St. Helena, . . .	...	22,211	...	...	...	...
<i>Australia.</i>						
New South Wales, . . .	2,37,280	1,16,686	65,404	3,369	...	...
	4,51,98,125	8,44,08,802	1,66,91,830	2,25,60,725	3,48,57,831	5,32,39,047

The principal articles of export in the above years were as follows:

	QUANTITIES		VALUE.	
	1834-35.	1841-42.	1834-35.	1841-42.
Cotton from Calcutta, . . .	3,52,022 maunds.	1,12,576 maunds.	31,26,070 r.	12,00,093 r.
... Madras, . . .	91,595 cwt.	414,946 cwt.	15,79,325	65,65,543
... Bombay, . . .	...	161,026,110 lbs.	1,16,15,794	2,16,79,410
Grain from Calcutta, . . .	24,27,907 maunds.	29,54,987 maunds.	36,60,685	41,01,991
... Madras, . . .	12,99,793 cwts.	1,763,533 cwts.	25,87,993	31,33,497
... Bombay, . . .	...	114,907 bags.	5,43,874	5,20,637
Indigo from Calcutta, . . .	85,150 maunds.	1,21,710 maunds.	85,15,054	2,39,96,004
... Madras, . . .	1,971 cwts.	16,698 cwts.	4,12,282	31,93,499
... Bombay, . . .	...	352,883 lbs.	...	5,30,646
Opium from Calcutta, . . .	11,050 chests.	19,739 chests.	1,08,35,569	1,44,98,621
... Bombay, . . .	...	15,762	99,38,115	1,14,39,274
Silk piece goods from Calcutta, . . .	559,632 pieces.	561,278 pieces.	30,87,457	30,36,825
Wool from Bombay, . . .	...	4,066,990 lbs.	...	7,69,468
Sugar from Calcutta, . . .	3,64,220 maunds.	15,61,804 maunds.	28,81,533	1,87,85,615
... Bombay, . . .	...	227,606 cwts.	7,51,638	18,05,010
Total exports from Calcutta, . . .	...	...	4,51,98,125	8,44,08,802
... Bombay, . . .	...	...	3,48,57,831	4,56,48,179
... Madras, . . .	...	...	1,66,91,830	2,25,60,725



## V. EXPORTS OF BRITISH AND IRISH PRODUCE TO INDIA.

1. The declared value of British and Irish produce and manufactures exported from the United Kingdom to the East India company's territories and Ceylon, in each year from 1827 to 1850, was as under:

1827	£3,662,012	1833	£3,495,301	1839	£4,748,607	1845	£6,703,778
1828	4,256,532	1834	2,578,569	1840	6,023,192	1846	6,434,456
1829	3,059,218	1835	3,192,692	1841	5,595,000	1847	5,470,105
1830	3,895,530	1836	4,285,829	1842	5,163,888	1848	5,077,247
1831	3,377,412	1837	3,612,975	1843	6,404,519	1849	6,803,274
1832	3,514,779	1838	3,876,196	1844	7,695,666	1850	

2. The quantities and declared value of the principal articles of export, consisting of British manufactured goods, from the United Kingdom to the British territories in Continental India and the contiguous islands, in 1846 and 1849, were as follows:

	1846.		1849.	
	Quantity.	Value.	Quantity.	Value.
<b>I. Cottons.</b>				
White or plain cottons,	206,457,987 yds.	£2,627,098	258,486,822 yds.	£2,787,907
Printed or dyed cottons,	25,236,452	608,615	37,457,175	649,948
Hosiery, lace, and small wares,		14,428		64,086
Twist and yarn,	24,193,923 lbs.	1,087,744	22,193,700 lbs.	874,947
<b>II. Woollens.</b>				
Woollen yarn,	1,465 lbs.		3,467 lbs.	
Cloths of all sorts,	25,778 pieces.		24,362 pieces.	
Woollen or worsted stuffs,	27,676		36,901	
Flannel,	84,263 yds.	237,946	118,742 yds.	225,815
Blanketing,	8,382		36,429	
Carpets,	11,542		5,880	
Woollens mixed with cotton,	84,720		293,465	
Hosiery,	522 doz. prs.		1,975 doz. prs.	
Sundries,		6,491		12,518
<b>III. Linens.</b>				
Linen by yard,	1,205,968 yds.	44,921	1,521,472 yds.	58,274
Thread and tapes,		1,366		1,393
Yarn,	6,720 lbs.	288	11,656 lbs.	964
<b>IV. Metals.</b>				
British copper,	78,980 cwt.	377,500	6,481 tons.	374,549
Pig iron,			1,039	
Bar iron,			21,276	
Bolt and rod iron,			4,970	
Cast iron,			183	
Iron wire,		161,039	51	
Wrought iron, anchors, &c.,			537	
Hoops,			4,340	
Nails,			304	
All other sorts,			6,812	
Unwrought steel,			74	
Hardware and cutlery,	19,810 cwt.	108,886	19,553 cwt.	107,337
Machinery and mill work,		116,771		15,507
Lead ore,			12 tons.	
Pig and rolled lead,			2,684	
Shot,		14,139	433	
Red lead,			709	
White lead,			262	
Tin and pewter,		6,341		
Zinc or spelter,			88	
<b>V. Sundries.</b>				
Apparel and haberdashery,		88,868		126,327
Arms and ammunition,		222,397		163,920
Beer and ale,		110,922		111,151
Printed books,		28,491		133,241
Coals and culm,		39,664	81,866 tons.	43,017
Earthenware,		30,157		31,282
Glass,		58,894	45,257 cwt.	48,461
Leather and saddlery,		48,141		35,286
Plate and plated ware,		29,969		29,222
Salt,	290,334 bushels.	4,997	1,195,935 bushels.	17,741
Stationery,		66,326		86,030

*Indian shipping.*] The merchant vessels belonging to Bombay in 1848 were 69 = 34,354 tons, and manned by 4,134 men; to Calcutta, 106 = 37,222 tons, and manned by 2,888 men; to Madras, 8 = 2,645 tons, and manned by 236 men; to Coringa, 23 = 4,338 tons, and manned by 250 men.

*British shipping.*] From the comparative statements of British shipping entered inwards and cleared outwards from and to places within the limits of the East India company's charter, for the years 1843 and 1844, it appears that the number of vessels entered inwards at the port of London during 1844 was less than the number that entered during 1843 to the extent of 4 vessels, with an increase of 1,688 tonnage; the figures for the respective periods being 542 vessels and 222,810 tonnage; and 538 vessels and 221,122 tonnage. In 1849, the number of vessels was 594 = 281,768 tons; and in 1850, 597 = 288,849 tons. The entries at Liverpool in 1843 were 162 vessels = 73,170 tons; in 1844, 210 vessels = 90,496 tons. In 1849, their number was 199 = 95,516 tons; and in 1850, 248 = 123,843 tons. The returns for Bristol and Hull, for the former period, and for the Clyde and other Scotch ports, for both periods, show an increase. The increase in the case of Bristol and Hull between 1843 and 1844, was 6 vessels = 1,944 tons; and in that of the Clyde and the other Scotch ports, 5 vessels = 2,454 tons. In 1849, the Clyde and Scottish ports received 46 vessels = 17,731 tons; and in 1850, 59 = 21,640 tons. But Bristol and Hull, which received 29 vessels = 11,464 tons in 1849, received only 22 vessels = 8,461 tons in 1850. A general review of the entries inwards gives a total increase of 45 vessels and 15,128 tons in favour of 1844 against 1843; the arrivals in the one year being 805 vessels with 331,605 tons, and in the other 760 vessels with 316,477 tons. The gross increase between 1849 and 1850 was 58 vessels = 36,314 tons; viz., in 1849, 868 vessels = 406,479 tons; in 1850, 962 vessels = 442,793 tons. The clearances outwards in all respects showed a large increase for 1844. There were despatched from the port of London during that year, 449 vessels of 186,917 tons, against 395 vessels of 162,628 tons in 1843; or an increase of 54 vessels and 24,289 tons. In 1849, the clearances outwards were 580 vessels = 276,718 tons; and in 1850, 584 vessels = 291,741 tons. From Liverpool, 320 vessels of 119,340 tons went out in 1844; while in the previous year only 255 vessels = 99,960 tons left; thus establishing an increase of 65 vessels and 19,380 tons. In 1849, 303 vessels = 149,224 tons cleared outwards; and in 1850, 331 = 167,937 tons. Bristol and Hull despatched 13 vessels more, with an increase of 3,755 tons in 1844 than 1843; but show a decrease in the clearances of 1849 and 1850, of from 18 vessels = 7,551 tons in 1849, to 13 vessels = 6,148 tons in 1850. The Clyde and other Scotch ports sent out in 1844, 7 vessels and 1,580 tons beyond the number of 1843; and in 1850, 18 vessels = 8,106 tons beyond that of 1849; viz., in 1849, 227 vessels = 88,563 tons; in 1850, 245 vessels = 96,669 tons. A review of clearances outward gives a total increase of 139 vessels = 49,004 tons between 1843 and 1844; the gross number for 1844 being 965 vessels = 373,915 tons; and for 1843, 826 vessels = 324,911 tons. In 1849, the total clearances outward were 1,128 vessels = 522,056 tons; in 1850, 1,173 vessels = 562,495 tons.

The following general remarks on the trade betwixt Britain and India, are from an able pamphlet entitled *India, Great Britain, and Russia*: "England carries on with India a lucrative and increasing commerce. That commerce, like most of the elements of improvement in India, is yet but in its infancy. The next generation will see it vastly ex-

tended; and that which succeeds will behold it still enlarging itself, but still susceptible of further increase. The wide-spread and fertile provinces of India are capable of producing, in almost boundless quantities, articles which are of prime necessity to the manufacturing power of England; and that power can supply to the natives of India commodities which are of prime necessity to them, on better terms than they can procure them at home. The cotton of India may be imported into this country, manufactured into cloth, then returned to the place from which the raw material was obtained, and sold at a less price than home-manufactured goods, yet yielding a profit at every step of the transaction. Here, then, is a source of prosperity to the agricultural industry of India and the manufacturing industry of England. From the nature of the climate and the established habits of the people, cotton piece-goods will continue to furnish the clothing of the mass of the people of India, as they have hitherto done. England can produce these goods at a cheaper rate than any country in the world. But to enable England to keep employed her untiring and almost unlimited machinery, a constant and steady supply of the material for its operation must be found. India can afford this. It is true that at present but a small part of the supply is derived from that quarter; but it is increasing; and in the event of any sudden suspension of supply from other countries, how greatly would it increase, and how incalculable would be the advantage of being able to turn to the East as a resource against disappointment in the West! Such disappointment is by no means beyond the limits of possibility. We have been at war with America—we may again be in that state, however anxious to avoid it. What would be the condition of Lancashire and the south-west of Scotland if the supply of cotton were interrupted? What would be the condition of our general commerce if one of our most important articles of export could no longer be furnished? Is it not wise, then, to guard against circumstances which may arise, in despite of all that sagacity can do to foresee, or prudence to avert them. A sufficient and certain supply of cotton being essential, not merely to the prosperity but to the very existence of our principal manufacture, it is not unnatural to place it foremost; but India can supply many other articles for which a steady and increasing demand exists in this country. We may select silk for an illustration. The silk manufacture of England has greatly increased, and will probably continue to increase for a long period. From India the manufacturer may depend upon an almost inexhaustible supply of this article, the quality of which will improve in proportion to the encouragement which the grower receives. Sugar is a commodity which habit has rendered a necessary of life. The freight of so bulky an article from such a distance is certainly a serious drawback upon its general consumption here; but if a supply from the colonies, which have been accustomed to furnish it, should cease or be seriously diminished, the power of resorting at once to another market would prevent the occurrence of any great inconvenience to the consumer. In these instances, and in many others which might be quoted, India has the power of ministering to our wants. In return for her commodities, we have the means of clothing her myriad population in the production of our mills and looms. The quantity of British goods at present consumed by the people of India is enormous, although the consumption has been greatly checked from two causes,—the poverty of a great portion of the people, and the difficulty of finding returns. These causes will disappear as the march of commercial enterprise proceeds. The poverty of

the people will be removed by the increase of employment, and the intelligence that will be diffused among them will tend to the improvement of their staple articles of silk and cotton, so as to enable them to compete successfully in the market with similar productions from other countries. The fertile plains of India will afford employment to the hundreds of thousands who depend for subsistence on the prosperity of the manufacturing establishments of Great Britain, and those establishments in return will contribute to the comfort and well-being of the people of India, while enriching the coffers of the British capitalist, and creating for the British workman fresh sources of demand for his labour and his skill. India wants capital,—England has superabundant capital seeking employment. A portion of that capital will certainly find its way to improve the cultivation of India, now that the country is open to European enterprise, and the prospect of return is so fair and promising."

*Monies.*] In general all the transactions in India are made in cowries, rupees, pagodas, or Spanish dollars:

*Money used in Bengal as common currency.*

4 cowries = 1 gunda,

20 gundas = 1 pon,

23 pons = 1 Company's rupee = 1s. 10½d.

A lack of rupees is 100,000.

The value of a Bombay rupee is 2s. 3d.; of a dollar, 5s.; of a Chinese tale, 6s. 8d.; and of a pagoda, 8s. The Sica rupee is rated at exactly 2s., or the 10th part of a pound sterling; so that the conversion of Sica rupees into pounds sterling is effected by striking off the right hand figure.

*Weights and measures.*] There is no uniformity in weights and measures in British India; they not only differ in different markets, but frequently in the same market; there are even different weights for the same article,—rice being often bought by one weight and sold by another. There is no denomination of weight greater than a *maund*, which is divided into 40 *seers*, but this denomination likewise differs;

A factory-maund being 74 lbs. 10 oz.

A factory-seer, 1 lb. 13 oz.

A bazaar-maund, 82 lbs. 2 oz.

Liquids are sold by the *maund*,—a measure supposed to contain a quantity equal in weight to the solid, but one also extremely defective.

*Population.*] We have already stated, that any estimate of the immense population of India, must be a mere approximation; and have given the elements of one approximative estimate by which it is reckoned at 134,000,000. Mr. Macculloch estimated the pop. of H., in 1840, at 131,751,509. Mr. M. Martin, about the same period, estimated the pop. of British India at 100,000,000; and that of the protected and allied states at the same number. Berg-haus, in his *Grundriss der Geographie*, published in 1843, estimates the total pop. of the Indo-British empire at 170,779,000; of which that of the protected states formed 58,479,000. In the closing paragraphs of this article will be found another estimate of the pop. of India.

*Hindus.*] The Hindus still form the most numerous tribe in this country. Prichard classifies them among the Arian race. Aryavarta, the holy land of the Bramins, and the ancient abode of the Hindus, who had a national existence here five-and-twenty centuries before the Christian era, was the country lying between the Himalaya and the Vindhya mountains; and from this region they appear gradually to have spread over India. The aboriginal mountaineers of the Himalaya were a different race. The features and persons of the Hindus mark them out as a peculiar race. Their hair is long, deep black, and by no means coarse. Their nose and lips resemble those of the European. Their eye-brows are full, especially in the men. The eye itself discovers a tinge of yellow in the white of it, while the iris is black; but it possesses little animation or intelligence. The form of the face is oval. In the northern provs. the men are strong and muscular. To

the S of Lahore they are generally delicate, and comparatively weak in the structure of their frames: even these, however, are what is called clean made, and can undergo great fatigue. In the N of India their stature approaches that which is common in the middle and S of Europe; in the S it diminishes sensibly, and in some parts it is very low. The Banians of Gujerat are reckoned the handsomest people in H.; some of the lowest castes, especially those whose business it is to remove all kinds of filth, and to bury and burn the dead, are deemed the most ugly. The female Hindus of the higher caste are distinguished by the polish and softness of their skins, and by their fine long hair, black eyes, extended ears, and straight delicate persons. Those of the inferior castes, however, are generally of small stature, and by no means handsome. "In spite of the disadvantages attendant upon the colour of the skin," says a writer in the *Asiatic Journal*, "perhaps no part of the world can present more perfect specimens of feminine beauty than are to be found in H. Travellers are struck with admiration at the appearance of many of the women filling their water-pots at the ghauts and wells, or going about the towns and villages in pursuit of their daily avocations. Their fine erect forms, set off by the graceful drapery wound in so picturesque a manner around them, are highly attractive, even when the veil casts its shroud over the face, leaving half an eye to do its worst of witchery." The custom of carrying light burdens upon the head from childhood gives great breadth to the chest, uprightness to the figure, and freedom to the movements; and the unfrequent use of shoes, or the substitution of an easy slipper for the tight ligatures worn in Europe, imparts a beauty which few save Oriental females possess—that of a perfect foot. Though seldom much below the middle height, and occasionally tall, all the native females are delicately framed; their hands and feet are exquisite, and the latter, when not encumbered by ornaments, resemble those carved by the chisel of a Grecian sculptor. The beauty of feature, though not quite is almost as common as that of figure; all have the splendid, dark, gazelle-like eyes, which form the characteristic mark of Orientals. In the whole pop., the general expression is softness; excepting when inflamed by rage, very few are fierce, and there is an indescribable charm, a fascination, about their eyes, which in many instances is quite irresistible. The form of the face is usually very fine, boasting that beautiful curve, from the ear to the chin, which is always given to statues. Strangers in India have few opportunities of judging of the beauty of the women, except from specimens found amongst the lower orders. Some idea of the great superiority of the higher ranks may be formed by the appearance of the Sepoys, a very handsome class of men, who are said to derive much of their personal attractions from their mothers. Many of the nautch girls are lovely creatures; and, though personal beauty is not considered essential to their profession, when superadded to other accomplishments, it is of course highly prized, and some romantic stories are told of the extraordinary attachments inspired by females of this class in the breasts both of native and European admirers."—"The dress of the H. is remarkably simple, and, except in the fineness of the cotton-cloth of which it is made, there is little difference in that of the rich and the poor, the distinction of the former consisting more in their jewels and attendants. The two grand divisions of the Hindu or Brahminical faith, are distinguished by the position of a white line on the face, which is made with chunam or lime—rather chalk and clay mixed—found in some holy places in Gujerat. The followers of Siva wear the line perpendicular, and



those of Vishnu horizontal. The adoration of Siva has at one time been more prevalent on the west coast, and that of Vishnu on the east; but they are now in so far blended. The distinguishing badge of the castes is a string tied round the shoulders; the number, form, colour and order of the threads in which, indicate the particular rank that the wearer holds in his caste. No member of an inferior caste is allowed to wear so many threads in the string as the very lowest order of the caste above him; and the Sudra is not permitted to wear any string. The men have two fashions of dress,—one which they are described as having worn in the days of the Greeks; the other has been in part adopted from the Mahomedans. The ancient dress consisted of three pieces of cotton cloth, one fastened round the waist, and falling down as far as the knee,—the second wrapped round the body,—and the third twisted round the head. The Mahomedan imitation consists of cotton-drawers down to the ankles, and a long robe of cotton crossed on the breast, and tied round the body with a scarf; but to distinguish them from the Mahomedans, who fasten the robe on the right side, the Hindoos fasten it on the left. A turban forms part of this dress, but it is easily distinguished from the Moorish turban. This is the regular dress of the Hindus; but many of the poorer classes have only a piece of cloth wrapped round the loins; while in the cold districts they have a thicker piece of cloth, oftentimes of woollen, and, sometimes of British manufacture, resembling the puncho of the South Americans, which answers all the purposes of a robe, a mantle, and a bed. This covering of all work is most frequent in the Balaghaut country, and among the mountaineers in the N. The head is usually shaved, except a small lock on the hinder part, and a pair of small mustachios.

*Castes.* No Hindu can ever quit the caste to which by birth he belongs; to be expelled from it, is the greatest misfortune which can befall him. These divisions and subdivisions have little intercourse with each other; they never intermarry; they will not even eat together; nor will they do so with any other, whatever be his profession, who belongs not to the same caste with themselves. The Parias, or casteless, are abhorred by their countrymen; they dare not enter a temple; they are employed in the meanest offices; and being by all accounted worthless, are for the most part infected with every vice. Of all the castes that of the Bramins is accounted the most honourable. This caste, indeed, claims precedence even of princes, who belong to the second order. The greatest crime which can be committed is the murder of one of their number; and if a Bramin be guilty of any crime, his punishment is much more mild than that which would be inflicted on a member of any of the other three orders. Even in the most trivial affairs they claim precedence, which is always willingly allowed them. Thus, if one of them has occasion to cross a river along with others, he enters the boat first,—is first landed on the opposite side,—and then stalks away without paying for his passage. The second class consists of warriors; and from them are chosen the sovereigns of the country, with the inferior rulers. The third class consists of such as are employed in agriculture and merchandise; and the fourth class of labourers and artists of every description. This class is subdivided into other inferior classes, corresponding to the various arts and trades.

*Mahomedans, &c.* The next numerous class of inhabitants are Mahomedans, who may perhaps amount to one-eighth of the number of Hindus. They are divided into the two great sects of Sunis

and Shiabs; the first of whom acknowledge Abu-becker, Omar, and Osman, as the legitimate successors of Mahomet; while the latter call these personages usurpers, holding, that Ali was the first lawful khalif. Except on this point, there is not much difference in their respective articles of faith. They are also divided into the four great tribes of Shaikh, Syed, Patan, and Mogul. The first are either descended from Arabs, or converts to their religion; the second claim their descent from Mahomet, and are the same as the Emirs of Turkey, but are generally descendants of Persians; the third are Afghans or their descendants; and the fourth of Mogul or Tartar origin.—The third class of population are the Sikhs, who are most numerous in the province of Lahore.—The fourth class are native Christians. These are most numerous on the coast of Malabar, where they are divided into the Nestorian and Romish churches; but there is also a considerable number of the descendants of the Portuguese in different parts of the country.—The fifth class are Jews. They principally inhabit the western coast, and are divided into White and Black Jews.—The sixth are Parsis, or followers of Zoroaster; and are principally to be found in Gujerat and Bombay. They are an industrious, active people.—To these may be added Chinese, Africans, and people belonging to every nation of Europe, with great numbers of the children of Europeans by native women. Taking the whole strangers and descendants of strangers in India, they do not amount to above one-seventh of the whole pop.

*Europeans.* Supposing the present pop. of India to amount to 136,000,000, it is calculated that of this number there are not above 40,000 Europeans,—or one European to 3,400 natives generally,—or, where they have the whole command of the government, one European to 2,125 natives. It is evident that, however equally distributed over the country this small number might be, they can produce comparatively little effect upon the modes of thinking or domestic habits of the vast multitude into which they have been interfused, especially when we consider that none of them purpose to remain permanently in the country, but only aim at making a fortune as rapidly as they can, and then retiring to spend it on the opposite side of the globe. They have no more social habits with the people—as Burke remarked—than if they still resided in England. Still, however, the presence of Europeans in India appears the only chance for civilization—including under the term whatever knowledge is the most conducive to the introduction of true religion—that has ever, in the whole lapse of time, been afforded to the mighty mass of its inhabitants.

*Hindu religion.* The customs of H. are so closely connected with its religion, that to describe the one, is in a great measure to delineate the other. The religion of the Hindus is connected with the most minute details of private life. The supreme God of the universe, according to the Hindus, is Brahm, or Brahma; at whose word this universe came into existence. Brahma, after the foundation of this world, created Bawaney, a female divinity, called 'the mother of the gods.' From her proceeded Brinba, Vishnu, and Siva, three male deities, the principal ministers of Brahma, and personifications of his different energies. Brinba, said to represent the wisdom of God, rides on the flamingo, and has a crown on his head. He is generally represented with four hands. In one he has a sceptre, the ensign of his power; in another the sacred books; and in a third a circle, the emblem of eternity. To Brinba was committed the care of creating the things of this world. He created man, and laid the foundation of the castes, into which the Hindus are divided. The Brahmins proceeded from his mouth; the Khetris from his arms; the Vaisys from his belly and thighs; and the Sudras from his feet. He composed the sacred volumes called Vedas, and delivered them to the Brahmins to be explained by them to the other castes. As Brinba represents the wisdom of the supreme Deity, Vishnu represents his goodness employed in the preservation of all subinary existence. He is said to have had several incarnations; and he is represented under many fantastic forms, each having a supposed connection with his numerous attributes. He sometimes rides on the garoora, a large kite; sometimes he

is seen in the figure of a serpent with many heads; sometimes in the form of a man with four hands and many heads, looking in every direction. Siva, who represents the power of the Deity employed in the correction of subliminary things, is represented as a man with a fierce look. He has a crescent on his head; a serpent twisted about his neck; and rides upon an ox. He is sometimes called Mahadeva, and presides over good and evil fortune. Darham, or Yam Rajah, is the Judge of the dead; he holds a sceptre in his hand, and rides upon a buffalo. Chiter and Gopt are his assistants. The former reports the good actions of men, the latter their evil actions. Each of these likewise has his assistants, Chiter's genius being stationed on the right hand, and Gopt's on the left of each individual of the human race. Krishen and the nine Gopia correspond to the Grecian Apollo and the nine Muses. Like Apollo, Krishen is represented as a young man, with an instrument resembling a flute. Indeed the instances in which the mythology of the Hindus corresponds to that of the Greeks and Romans, might induce us to believe that the former has been the original of the latter. Kamadeva, the god of love, corresponds to Cupid. His father is Maya, the general attractive power, and his mother, Retty, or Affection, by whom may be understood Venus. Like the Cupid of the Greeks, the Kamadeva of the Hindus is furnished with a bow and arrows; but the Hindu conception of this weapon is still more highly poetical than that of the Grecian mythology, for the bow of Kamadeva is of sugar-cane, or of the most fragrant flowers, and the string is of five bees. The number of his arrows is five; and each of them is headed with an Indian blossom of a healing quality. Lingam is the Priapus of the Greeks, and is worshipped by such unmarried women as desire husbands, and by such married women as desire children. Vuruna is the god of the seas and waters, and represents Neptune. He rides on a crocodile. Zolus is represented by Vayu, the god of the winds, who carries a sabre in his hand, and rides on an antelope, the fleetest of animals. The care of learning is committed to Vrikaspathy, and a class of nymphs called Vidyahares, or professors of science. Agnee, the god of fire, rides on a ram. The earth is represented by a goddess called Vasudka, Pakrita, or Nature, is represented as a beautiful young woman. Surya, the sun, sits in a chariot, and is drawn by one horse. He has sometimes seven heads, and sometimes twelve. Sangire, the wife of the sun, is the mother of the river Jemna. Chandara, the moon, holds a rabbit in her hand, and sits in a chariot drawn by antelopes. Ganes is the god of prudence. Fame is known by many names, but is generally represented by a serpent with many tongues. Virsavana, or Cobhair, the god of riches, rides on a white horse. Darmadeva, the god of virtue, is sometimes represented under the figure of a white bull. Among those numerous divinities it seems impossible to ascertain the superiority of rank. Many of them appear to be equal in dignity; and particular deities have their own votaries, according to the suggestions of a prejudiced fancy.

Besides these gods, which are inferior not only to Brahma, but to his principal ministers, there are many demi-gods dispersed in the various regions of the air, the earth, and the waters. Of these demi-gods there are some whose exploits are said to have a remarkable coincidence with those of Bacchus, Hercules, Theseus, and the other divine heroes of Grecian fable. Their number appears to be infinite: some of them being assigned to the superintendence of almost every object in nature. They are by nature mortal; but, by the use of a drink called *amrit*, they acquire immortality.—Most of the Hindu idols are formed of clay, and very much resemble in composition, colouring, and execution, though of course not in form, the more paltry sort of images which are carried about in England for sale by the Lago di Como people. At certain times of the year, great numbers of these are in fact hawked about the streets of Calcutta, before they have been consecrated by being solemnly washed in the Ganges by a Bramin pundit. Till this is done they possess no sacred character, and are frequently given as toys to the children, or used as ornaments of rooms, which when hallowed they could not be, without giving great offence to every Hindu who saw them thus employed.

The ceremonies of the religious worship of the Hindus consist in prayers, fasting, visiting the temples, and performing certain actions accounted sacred. A Hindu prays three times daily,—in the morning, at noon, and in the evening. During prayer, he turns his face towards the East; and, like the Mahomedans, he always washes before he takes meat, and frequently at other times. To bathe in the water of the Ganges is a ceremony highly religious, and efficacious in purifying from many offences. Running water is always preferred for ablutions when it can be obtained. Sacrifices are offered to the gods, but no living creature is ever killed for that purpose,—the doctrine of transmigration rendering the killing of an animal an immoral rather than a religious action. Incense, flowers, fruit, and money, are the common offerings. Pilgrimages to holy places form a great part of the ceremonial of the Hindu faith. The places of these were usually those that were the most inaccessible, such as mountains, hot springs, cascades, caves, the junctions of rivers, and wild and pestilential places by the sea-shore. The multitudes that still throng to some of these places are immense. To detail the numerous ceremonies performed by the Hindus, in the worship of their various gods, would neither interest nor entertain the reader. Our limits are totally inadequate to describe their various institutions of fasting, and different kinds of penance, and self-castigation.

Among the Hindus, the immortality of the soul is a universal

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tenet; and the transmigration of the soul is a doctrine no less universal. This world, therefore, is by the Hindus considered both as a state of probation, and as a state of reward and punishment. Their hell is called Narekha; and contains many mansions of different degrees of punishment, into which individuals are introduced according to their various degrees of guilt. When they have continued in this place during a period sufficient to expiate their offences, they are sent back to this world, to animate other bodies, of which the nature corresponds to their former behaviour; and when at last, by repeated transigrations, they have been cleared from every impurity which adheres to mortals, they are conveyed to the heavenly regions, where they are absorbed into the universal Spirit. When religion has condescended to interfere in the articles of dress and food, we cannot expect that the more important affair of marriage should be left indifferent. Marriage is, by his religion, made incumbent on every Hindu who has the smallest prospect of being able to maintain a family; and, in a country so fertile as H., few individuals have not this in their power. In this country, no man receives a dowry with his wife; on the contrary, he makes presents to her parents,—a custom which must have proceeded from the ancient practice of purchasing wives.

*Science and Literature.* The learning of H. is a subject with which Europeans are but just commencing acquaintance. Few are qualified to give an account of it, much less to form a complete idea of it. "Wherever we direct our attention to Hindu literature," says Jones, "the notion of infinity presents itself; and the longest life would not be sufficient for the perusal of nearly five hundred thousand stanzas in the Puranas, with a million, and more perhaps, in the Vedas, and other works." In H., the sciences seem to have arrived at greater perfection than the arts. In all the arts of calculation their accuracy has astonished Europeans. Of their progress in geometry, Dr. Playfair gives the following remarkable instance: In the *Ayin Akbari*, the proportion of the circumf. of a circle to its diameter is said to be as 3,327 to 1,250,—a solution to obtain which arithmetically, in the simplest manner possible, he assures us would require the inscription of a polygon of 768 sides, and at least nine extractions of the square root, each extending to ten decimal places. The zodiac, according to the Bramins, is divided into 27 constellations. The ecliptic, as in Europe, is divided into signs, degrees, and minutes. The places of the sun and moon are calculated from the time of their entrance into the moveable zodiac. This causes the beginning of the year, with regard to the seasons, continually to advance. In 24,000 years it returns to the same point. In their calculations they suppose 800 years to contain 292,207 days, which makes their year only 1' 53" longer than that of De la Caille,—a degree of accuracy which has not long been known even in Europe. In calculations respecting the motion of the moon, as in Europe, they use the cycle of 19 years. The most difficult particulars in the motion of this secondary planet are calculated with much precision. The apparent motion of the fixed stars eastwards is, by the Siamese tables, made to be only 4" too quick,—a calculation in which the celebrated Ptolemy made an error of no less than 14". The most celebrated of all the Indian astronomical tables are those known by the name of the *Tables of Tirvalora*. If Dr. Playfair's reasoning be just, the age of these tables is 4,905 years, corresponding to the year of the world 902. Whether this era—commonly known by the name of the *Calayouham*—be a real era, ascertained by the actual observation of the places of the heavenly bodies at that time, or an imaginary period, discovered by calculating backwards, has excited among astronomers much altercation. Playfair is decidedly of opinion, that the Calayouham was ascertained by the actual observation of the state of the heavenly bodies at that precise period. Others, however, hold a very different opinion, and their reasoning appears completely to overthrow the arguments of Playfair upon the great antiquity of Indian astronomy. Amongst these, Marsden in the *Philosophical Transactions*, and after him, Bentley in the *Asiatic Researches*, hold the first rank. We do not mean to follow the arguments on either side, as these are foreign to a work of this nature, and can be interesting only to the scientific reader, whom we refer to the works already mentioned. Suffice it to say, that Bentley has shown, in a very clear manner, that the *Surya Siddhanta*, the most ancient of all the astronomical performances of the Hindus, and to which the Indian astronomers assign the ridiculous antiquity of 2,164,900 years, cannot be more ancient than the beginning of the 8th cent., and that the celebrated tables of Tirvalora, which the Hindus, and after them Playfair, assert were compiled from actual observation in the year of the world 902, have in reality only been written and dated 516 years ago.—Poetry has existed in India from the earliest ages, and has assumed both the epic and dramatic forms; but, though the ideas are often sublime, they are too frequently turgid, and swell into that inflated diction which is equally contrary to genuine poetry and to good sense. Painting and sculpture are in a state still inferior to that of poetry in this country. The Hindus appear to be ignorant of the rules of perspective, and their drawing is in general deficient. In colouring they are greater proficient. Their sculpture is rude, and said to have some resemblance to that of the ancient Egyptians; by some it is asserted to be much more elegant. Like the architecture of that people, too, their buildings are calculated to strike rather by magnitude than elegance; they are large, and abound in pillars, but have no pretensions to an order, and are deficient in proportion. The music of H. is represented as still remaining in an imperfect state. Melody seems to be more studied than

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harmony, and many of the simple airs are pleasant even to an European ear. The musical instruments are numerous.

**Arts.]** The use of powder and of fire-arms was known in the East long before it was discovered in Europe, but the precise date of the discovery is unknown. Fire-works of different kinds have long made part of the amusement of many eastern countries; and in the construction of these they equal, if they do not excel, the most dexterous of Europeans. The pottery of the Hindus is rude and coarse; in anything, however, that merely requires handling, they excel. Some of their embroidered leather is very rich, and their cabinet-work is tastefully inlaid and painted. In the N of India Proper a very fine paper is made from the inner bark of a tree. Glass-making is understood and practised. The ingenuity of the Hindus in several of the mechanical arts and manufactures has long been celebrated. Their tools and implements, however, are simple in the extreme, and to Europeans they appear very imperfect. The instruments of weaving in India are now precisely of the same construction they exhibited 2,000 years ago. The Indians still spin their yarn, warp as well as weft, with distaff and spindle. The loom upon which the cloth is woven is composed of a few sticks or reeds; and when it is in operation, it is placed under the shade of a tamarind or mango-tree, with the balance fastened to one of the branches. Two loops underneath the rear, in which the weaver inserts his great toes, serve as treadles; and the shuttle, formed like a netting-needle, but of a length exceeding the breadth of the cloth, is used alternately to draw through the weft and to strike it up into the web. The loom has no beam; the warp is laid upon the ground, the whole length of the piece of cloth, and upon this primitive machine the Asiatic produce muslins which have long been subjects of admiration for their beauty and the fineness of their texture. The Hindus are exceedingly skilful in the practice of those juggling arts of which the chief object is to deceive the senses.

**Languages.]** The original language of H. seems to have been the Sanscrit,—a language now found only in books, and understood only by the learned. Jones assures us that it is in every respect a refined speech, and more perfect even than the Greek. It answers nearly the same purpose in India that Latin did in Europe during the Middle ages, being the principal vehicle of religion, law, science, and literature. The languages now spoken in H. are numerous, but it is generally believed that they are all derived from the Sanscrit. Of these languages, or rather dialects, the following are the chief:

1. The *Cingalese*, spoken at Candy in the island of Ceylon, said to have a close resemblance to the Sanscrit.

2. The *Tamul*, spoken in almost every part of the Deccan. It is harmonious, and easily acquired. The central parts of the Deccan use the *Mahratta*.

3. The *Malabar* language, spoken from Cape Comorin to the Illi mountain. It has several alphabets.

4. The *Canaree*, or language of Canara, which is extensively spoken throughout Mysore and as far as Goa.

5. The *Marashda*, or *Maharatta* language, spoken by the Maharattas, whom Weddin assures us we should call Marashdi.

6. The *Telinga*, or *Talinga*, an harmonious, nervous, masculine, copious, and learned language, which, like the Sanscrit, has 52 characters, and these are sufficient to write the latter. It is spoken on the coast of Orissa, in Golconda, on the river Kristna, and as far inland as the mountains of Balaghaut. All these languages have their own alphabets; so that in every prov. you must make yourself acquainted with a distinct kind of character, if you wish to express your thoughts in the dialect common to each.

7. The common *Bengali*, or *Gaurd* language,—a wretched dialect, corrupted in the utmost degree. It is spoken at Calcutta, and generally over Bengal on the banks of the Ganges.

8. The *Devanagari*, or *Hindustani* language,—called by some *Nagru*, *Nagari*, and also *Davanagari*. It is spoken at Benares, and has 52 characters, with which you can write the Sanscrit. Its mode of writing has been introduced into all the N part of India.

9. The *Guzaratic*, which has been introduced not only into the kingdom of Gujerat, but also at Baroche, Surat, Tatta, and the neighbourhood of the Balaghaut mountains. Its characters are little different from those of the Devanagari.

10. The *Nepalic*, which is spoken in the kingdom of Nepal, and has a great similarity to the Devanagari.

There is a language called *Praerit* still spoken among the Sikhs to the NW of Delhi, which Mr. Colebrooke identifies with the vernacular Sanscrit. The Serampore missionaries calculate that the Hindustani, the Maharatta, the Bengali, and the Orissa, (the vernacular dialects of Central India) are spoken by upwards of 50,000,000.

**Education.]** Among the Hindus female education seldom extends farther than to the simplest precepts of religion, and those domestic duties which are afterwards to become necessary. On the education of boys more care is bestowed. They are taught to read and write by the Bramins, who are the only schoolmasters. The leaves of the palm are used for

paper, and a pointed iron instrument, in place of a pen. These leaves are not apt to decay, nor are the letters formed upon them easily effaced, and to make the impression more strong, a black powder is rubbed upon the characters. The palm-leaves are cut in long pieces, an inch in breadth, and a number of these, fastened together by the ends, form a book. Sometimes they write on a kind of paper, and for a pen make use of a small reed. Beginners form their characters in sand strewn on the floor. The rules of calculation are performed with small stones. The following statement comes from one whose learning and intelligence entitle all he says to high respect. Civilized England might lay some of the words of Sir Alexander Johnston to heart: "In the Hindu political system, the education of the people has always formed part of the business of the government; and with this view, a certain portion of the produce of the soil in every district is assigned to the support of the schoolmaster; in Scotland a similar plan has been followed to a certain extent; in England no such provision exists; while in India it is clearly traceable 2,000 years ago. So highly, indeed, is education prized among the Hindus, that it is regarded with a sort of religious veneration, and this feeling of respect extends to those employed in its administration. The children are brought by their parents in early infancy into the presence of the schoolmaster, to whose care they are consigned with something of the solemnity of a public and official act." It was stipulated at the last renewal of the Company's charter, that £10,000 should be annually devoted from the surplus territorial revenue of India to the purpose of education. It appears that the Company, although there was no surplus revenue, have in some years expended double and even treble this sum.

**Colleges.]** The Government Sanscrit college at Calcutta was established in 1821, and is largely endowed. The establishment consists of 14 Pundits, and 100 scholars on the foundation. The course of study in this college comprehends grammar, general literature, rhetoric and prosody, law and logic, and natural and experimental philosophy. A portion of the college funds is assigned to defray stipends to 100 students who are either strangers or indigent.—The Madrissa or Mahomedan college was founded in 1780, by Mr. Hastings, and is also largely endowed by the government. The course of education comprises the Arabic and Persian languages, general literature, law, philosophy of law, traditions of Mahommed, rhetoric, logic, geometry, arithmetic, astronomy, according to the British system; to which may be added the regulations of the British government.—The Bishop's college, near Calcutta, founded in 1820, for the education of such students as the government, or the religious societies connected with the Church of England, may place there, has a principal, 2 professors, 8 missionaries, 2 catechists, and a printer.—In the interior of India the most important of the government seminaries are the colleges of Benares and Agra: the former founded in 1794; the latter in 1823.—A college for both Hindus and Moslems exists at Delhi.—A Hindu college exists at Punah; and an Engineer college has been formed at Bombay. The Medical college of Bengal numbered 3,952 native students in 1846-7.—The Bramins have several seminaries of learning, which have existed during many ages. At Cangiburam in Carnate there is still a celebrated Bramin school, which, according to the testimony of Ptolemy, existed in the 1st cent. of the Christian era.

**Government.]** The home-government of British India is composed of,—1. The Court of Proprietors; 2. The Court of Directors; and 3. The Board of Control.



*Court of Proprietors.*] The proprietors vote according to the amount of stock which they possess. The lowest sum which entitles to a single vote is £1,000 stock. The number of proprietors recently entitled to vote are about 1,956. The proprietors elect the directors and declare the dividend. All proceedings in parliament affecting the company's interest, and all grants of money beyond £200 must have their approval.

*Court of Directors.*] The court of directors consists of 24 proprietors, who conduct the whole affairs of the Company, subject to the superintendence of the board of control. They are elected for four years, six going out annually by rotation. These are re-eligible at the expiration of a year, and are mostly re-elected: 13 form a court. The election of its chairman and deputy-chairman is made annually, and rests with the directors. The power of nominating the governors of the presidencies is vested in the directors, subject to the approval of the Crown. They can recall the governors or any other of their servants independently of the board of control. For the despatch of business, the court of directors divides itself into three committees: the committee of correspondence,—of buying and warehouses,—and of shipping. By the act of 1794, the directors were charged to appoint a secret committee, in order to forward to India such despatches as the board of control consider should be secret. This committee usually consists of the chairman, deputy-chairman, and the senior member of the court of directors. These all take the oath of secrecy, and form the organ for transmitting the orders of the board of control on all matters relating to war or peace.

*Board of Control.*] In August, 1784, Mr. Pitt's celebrated India bill was passed. By this enactment, a board of control was established, composed of six privy-councillors, to be selected by the king, whose duty it was declared to be to superintend the territorial concerns of the Company, to inspect all letters passing to and from India between the directors and their agents (with the exception of such only as are purely commercial)—to alter and amend in such manner as they should think proper the despatches sent to India,—and even, where the case should appear urgent, to transmit orders to the functionaries in India without the concurrence of the directors. The chancellor of the exchequer and one of the principal secretaries of state are, by virtue of office, members of the board of control. Of the other four members, the senior is president of the board, and with him the whole business of the board has ordinarily rested, the other commissioners assembling but seldom, and being called upon to deliberate still more rarely. Under this arrangement it has been truly said that the president "is essentially a new secretary of state—a secretary for the Indian department"—that "the powers of the board of control convert the Company's courts into agents of its will. The real, the sole governing power of India is the board of control, and it only makes use of the court of directors as an instrument, a subordinate office, for the management of details, and the preparation of business for the cognizance of the superior power." By a subsequent act, the commissioners are no longer required to be taken exclusively from the privy council, and it is provided, that their salaries shall be paid by the East India company.

*Executive Government.*] The executive government of the Company abroad is administered at three presidencies, Bengal, Madras, and Bombay. In Bengal the government consists of a governor-general and 5 councillors, and at Madras and Bombay of a governor and 3 councillors. The presidency of Bengal includes the whole of H. Proper, that is to say of the country N of the Nerbudda, comprising also the E shores of the bay of Bengal, and extending in the opposite direction beyond the banks of the Indus. It is true that in 1833, the formation of the new presidency of Agra, or the North West presidency, was announced; but these provinces are still governed only by a lieutenant-governor, and we believe little distinction is retained in the principal departments of their administration from those of Bengal. The three commercial emporia in the straits of Malacca were also annexed to the Bengal presidency; but are to be dissociated from it from and after the 1st of November, 1851. The presidency of Madras comprises almost the whole of Peninsular India; that of Bombay is confined to a narrow strip on the Malabar coast, between Cambay and Goa, with the addition of Gujerat and Cutch, and the appendage of Sind. The directors may appoint the commander-in-chief in each presidency to a seat in the council; the other councillors are civilians, who must have resided ten years in India in the company's service. The governor-general has a controlling power over the governors of Madras and Bombay; and if he thinks fit to proceed to either of these presidencies he there assumes the chief authority. The governors of the

presidencies of Bombay, Madras, and Agra, are extraordinary members of the supreme council when it assembles within their respective territories.

The power of making and enforcing laws for the government of the respective presidencies rests in the governor-general, or governor, and the councillors; subject, in some instances, to the consent of the supreme court of judicature to register their decrees, and likewise to the approval of the board of control and court of directors.—The supreme court of judicature for Bengal consists of a chief-justice and 2 puisne justices; that of Madras and of Bombay, of one chief-justice and one puisne justice each.

There exists in India two concurrent, and in some instances, conflicting systems of judicature:—the Company's courts, and the king's or supreme courts. In the Company's courts there are three grades of European judges,—the district, the provincial, and the judges of the *sudder* court. There are also two classes of native judges: *munisifs*, of whom several are stationed in every district, and *sudder amins*, established at the same stations with the European district-judges. There are also magistrates, who exercise civil jurisdiction; and registrars, who decide such causes as may be referred to them by the judge.

Trial by jury is confined entirely within the limits of the supreme courts, the jurisdiction of which extends to Europeans generally, and to natives also, within a certain distance around the several presidencies.

The police system of India is founded on the division of each revenue district of about 4,000 sq. m., into sections of about 16 m. square. Each of these sections may contain on an average 253 villages, and perhaps 56,000 inhabitants. To each district there are a *thannadar*, or officer equal to a serjeant, and from 10 to 15 men, attached. Along some of the high roads, there are stations every 2 m., wherein one or two policemen remain to patrol the intervening distances; there are besides a few horsemen to every large district to assist the foot police. The *darogha*, or police inspector of every small district, visits the spot where any crime has been committed, examines witnesses, arrests offenders, and forwards his report and depositions, attested by three or more of the principal inhabitants of the nearest village, to the magistrate; but has no power to give redress for any trifling injury, whereas the police under native governments can give instant and effectual redress in ordinary cases. The magistrate has not only a district of 4,000 sq. m. to look after; but has all its revenue settlements to arrange, and taxes to collect. He is in fact the sole agent for this enormous estate; and has to adjudicate on the numberless suits arising within it.

The government of the British possessions, as above explained, is one of law and responsibility, under numerous and salutary checks. At the same time, it must be confessed, that as far as the natives themselves are concerned, we rule by force alone in India. Neither patriotism, nor piety, nor interest, nor ambition, can attach the natives to our sway in the present state of things in that country; and we have done very little yet to assimilate the national mind and interests to our own. We do not indeed think that the tremendous assertion of Burke would be true in the present day, were the contingency contemplated by that illustrious orator to befall us: we do not think that "were we to be driven out of India this day, nothing would remain to tell that it had been possessed, during the inglorious period of our dominion, by any thing better than the *ouran-outang*, or the tiger;" but candour compels us to confess, that our government in India has too often exhibited a strange spectacle of misrule and impolicy. The main defects in our Anglo-Indian rule are thus temperately yet faithfully set forth by Mr. Mackenna in his continuation of Dr. C. Taylor's history of India: "The three years of grace allowed to the East India company for winding up their political affairs have begun. The period fixed for the termination of their lease of the government of India is the 30th of April 1854, and preparations ought to be going forward for regulating the government of that vast continent consistently with the in-

terests of the British people. The proprietors of India stock gave up all their rights in 1834, by the acceptance of the act of parliament which abolished the commercial privileges of the Company, and declared that the Eastern possessions entirely belonged to the Crown, and were merely vested in the Company for twenty years for the benefit of the empire. The respite then granted to the Company must soon come a close; it is, therefore, a public duty to investigate the subject, and ask, 'What course ought, in the present circumstances, to be adopted?' India has, unfortunately, been hitherto looked upon in parliament as a bore. Few of the young members study the Eastern questions; and, during the last 16 years, no annual inquiry has been made by the Commons into the administration or government of that great continent, although such inquiry ought, in a constitutional and imperial sense, to have been annually instituted. The result is, that India is not yet fully understood; neither are the numerous advantages arising from the connexion in any respect clearly developed. It should never be forgotten, that India has cost England nothing; for, besides defraying every expense more than tenfold, India has, in various ways, enriched a million of families in this island. Great Britain owes a great deal to India: and when the British people learn that the most extensive fields of prosperity are still open in that magnificent land, surely there can be no doubt that they will enter with spirit into the arrangement of plans for the welfare as well of this country as of the Eastern British empire. A complete and searching investigation of Indian governmental matters, will involve many decisions of moment; and, among them, one as to whether the system of seniority is to be continued, or whether young, active, and intelligent civil servants are to be preferred. This decision, in case the last named plan be adopted, ought to be attended with the stipulation that an examination of the competitors should always take place, and that the office should be given to the worthiest of the rivals, under proper guarantees of future good conduct. The disadvantages of allowing the directors or the Board of Control to retain all the patronage exclusively at their disposal, will form a subject of anxious inquiry; for the utility of offering certain employments for public competition has become evident. Family ties and partial interests must succumb before the general prosperity of the empire; and the cliques of the directors, of the proprietors, and of their parliamentary adherents must be annihilated. The world is watching the progress of intelligence even in India; and young men educated in Europe will no longer be tolerated there to rule the natives as they please, with perfect impunity, from being, as they fancy, secure from supercession by their covenant with the Company, and certain of advancement as contingencies arise. India cannot longer be maintained by the close borough principles. Free trade is as necessary in places of emolument and beneficial employment as in merchandise or other commodities, for the welfare of 152,000,000 is involved in it. The application, in India, of the various branches of education demands great care: it requires to be decided whether the schools are to be public or private nurseries of learning. The administration of justice in the courts of the Mofussil—as the districts of the interior are called in India—demands a laborious inquiry, as also do the various systems of police. In England but little has as yet become known of the abuses that prevail in India; but they will yet force themselves before the British people, in a way by no means acceptable, unless parliament by a satisfactory inquiry and investigation, and eradication of them all, does its duty and forestalls the outburst. The various establishments of India cry out for inquiry, in order that their uses, abuses, and results may become apparent. Parliament has already laid down at home abundant examples of this course of examination in the Official Salaries committee and other measures of that description. This course is necessary for India. No doubt there will be much difficulty in carrying it forward; but as it is far from being an impossibility, the sooner it, like the railway, is opened, the more speedily will its benefit be felt. The actual Indian governmental machine has been at work for 17 years, and, at length, the time has arrived for overhauling it—for examining into its defects and effecting the necessary repairs." The Board of Control does its duty lazily; for there is no man to spur it forward. It was at first adapted to control the vagaries of the directors; but it is now the drag upon the wheels of the governmental coach, and stops all progress. A board of 'energy and talent to produce good for India' is the present desideratum. There is no efficient public voice to control the acts of any authority in India, and the superintendence of the civil and military employees is by far too lax, for it tolerates vices of the grossest character; and hence the advancement of the country in wealth, civilisation, and happiness, is of the slowest kind, if it be not altogether torpid. Occasionally commotions arise which almost shake the social edifice to pieces, and Great Britain, having the care of it, is then frightened by the approach of danger into acts of justice and prudence. It is only at those periods of alarm, to which the Eastern empire is frequently exposed, that any wish to introduce measures likely to prove beneficial to India is exhibited."

*Native government and laws.* The government of those parts of H. which still belong to native princes is completely despotic, varying only in the apparatus of despotism. The native jurisprudence often evinces much knowledge of human nature, and much judicial discrimination; but not less frequently exhibits the powerful influence of superstition in perverting the understanding and moral perceptions of men. When the English first gained footing in India, the right of the soil was vested in the sovereign; the

people had only an annual indefeasible interest in it, subject to constant diminution at the will of the ruling power. The Bengal government, under the administration of Lord Cornwallis, so far restored the subject's right as to fix the proportion to which the state should be entitled, leaving to the possessor of the land, after this deduction, the benefit of progressive improvement, with an unrestrained power of alienation, to be regulated by native law. The property of a Hindu is distinguishable, as with us, into real and personal, moveable and immovable; but there is this difference betwixt British and Hindu law, that by the latter real and personal property are alike descendible to the same persons. There is great importance, however, attached by it to land, in which the sons are considered as possessing a special interest; having with their father—according to the doctrine of the *Mitachara*, which is prevalent in the peninsula and N of India—so far a co-ordinate right by birth in that part of it which is ancestral, that if he thinks proper to come to a partition in his lifetime, he must divide it as directed by law,—that is, he must give them and himself equal shares. Adultery is always punished criminally by the Hindus. Maintenance by a man of his dependents, even to the outcast wife or children, is with the Hindus a primary duty. Slavery is distinctly recognised in Hindu law. The various modes by which a person becomes a slave are, capture in war—voluntary submission to it—involuntary submission, as in payment of debt, or by way of punishment—birth or offspring of a female slave—and gift or sale by a former owner.

*Ecclesiastical establishment.* The Episcopal establishment of India is superintended by a lord bishop of Bengal, a bishop of Madras, and a bishop of Bombay; each assisted by an archdeacon. Ordinary chaplains receive 800 rupees per month in the Bengal presidency; 700 in that of Madras; and 670 in that of Bombay. Assistant chaplains have 500 r. per month.—At the close of 1850, 403 missionaries connected with 22 missionary societies, and 551 native preachers, were employed in India and Ceylon; and the number of native churches founded by them, during 50 years, was 309, with 17,356 members. The stations at which the gospel is preached were 260. There were at the same period 1,345 day-schools, at which 83,700 boys were receiving instruction; 73 boarding-schools, with 1,992 boys, chiefly Christian; 128 day-schools in which the English language was taught, and attended by 14,000 boys; 354 day-schools attended by 11,500 girls; and 91 boarding-schools, attended by 2,450 girls. The cost of this missionary agency in 1850 was £187,000. The Bible has been translated into 10 languages, and the New Testament into 5 others—not reckoning the Serampore versions.

*Revenue.* When H., in the time of Aurungzebe, was united under one monarch, the revenues amounted to £32,000,000, supposed, in a comparative sense, to be equal to at least £160,000,000 in modern Britain. When the British first gained possession of India, they found the system of public finance on precisely the same footing upon which it had remained from the dawn of history, notwithstanding the various dynastic revolutions occasioned by the invasion of Alexander, the Mahomedans, and Tamerlane, and the intestine broils of the different Moslem princes who figured in its later history. The system—which prevails generally among Oriental nations—consists in taxing the soil to an amount limited only by the will of the sovereign, so that rent and revenue may be considered as synonymous wherever it prevails. The desire of the rulers of India to possess the utmost possible portion of the produce of the land, led to minute admeasurements, inspections, and assessments. The land was parcelled out in small lots, which were held by the cultivator with a perpetual and transferable title emanating directly from the supreme authority. Between the crown or supreme power, and the cultivators of the soil, there existed a class of middle men—aptly designated by a native historian, "vultures, who grind the very bowels of their country"—who were appointed to collect the revenue, and were responsible for the sums assessed by government, and who out of the gross receipts were allowed a percentage usually of a one-tenth part. These middle-men, or collectors, are distinguished in India by the title of *zemindars*, or *talukdars*,—the actual cultivators, or those from whom the tax is collected, by that of *ryots*. There is a tendency, during each interval between the revolutions incidental to despotic governments, to that settled stability of interests and appointments which merges ultimately in hereditary possession; and hence the *zemindars*—whose office, according to the existing order of things, was indispensable—became in process of time a class not less permanently based upon the hereditary system than that of the *ryots*. It is easy to perceive how under such a system the wealth of the country as it was annually created found its way into the coffers of certain classes, whence it never again issued but for purposes of misrule and violence.

In this state, then, did affairs continue in India until the administration of Cornwallis, who, in 1793, remodelled the system of revenue in the presidency of Bengal according to a plan denomi-

nated the permanent settlement, the nature of which may be thus briefly described. A fixed assessment, unsubjected to further increase, either by the progress of improvement or the arbitrary will of government, and amounting to half the produce of the soil, was imposed; from which, as formerly, the zemindars were allowed a tenth part, and after the imposition of which they were entitled to grant leases to the ryots upon the principle of perpetuity, so long as the leaseholder or his disponees continued to fulfil the terms of such agreement. This system, though deriving its origin from benevolence, had no claim to relationship with wisdom, and speedily produced a total revolution in property throughout the whole of Bengal. The zemindars, thus constituted hereditary proprietors of the soil upon a quit-rent,—the amount of which was expressly stipulated, and admitted not of increase,—had thenceforward a powerful inducement to wring from the now completely subordinate ryots a greater share of the fruits of their industry than was directly claimed by government; while the ryots, oppressed by their rapacious masters, and unable to obtain justice in courts the doors of which were shut against them by their poverty, sunk into the apathy of indolence, and ceased to struggle for more than the bare supply of their natural wants. The rapacity of the zemindars thus ultimately defeated itself; for in proportion as industry became diminished, their means of remitting to government the sums regularly charged to their account diminished also, until, when totally unable to discharge their arrears, summary processes were instituted against them, and their estates exposed to sale; and so general was the destruction, that the whole landed property of Bengal is said to have changed hands since the establishment of the permanent system!

The Indian government has latterly become the purchaser of all estates which have been brought to sale, with the view of abolishing an authority which has stood between itself and the dispensation of that measure of just and benevolent government which it feels called upon to administer to all its subjects. In proportion as it succeeds in obtaining possession of the estates in Bengal, the government substitutes for this zemindary system another, which it has always principally followed at the other presidencies, and which, as it admits of no intervening authority between its officers and the actual cultivators, the ryots, is known under the name of the *ryotwary system*. The principal feature of this mode of administering the land revenue consists in this, that the government makes its bargain with each individual cultivator for the rent of his holding. In fixing these amounts in former years, too much of the old leaven of oppression was used by the officers of government, and the assessments were laid at so high a rate, that it has scarcely ever been found possible to adhere to them, so that a sort of bargain has to be made annually with the ryots, in settling which a great deal of discretion must necessarily rest with the officers. In this manner the legal claim of the government is, with but few exceptions, always greater than can be enforced without ruining the tenant, to whom abatements are made from year to year, varying in amount with the circumstances that influence his capability of paying, but which are generally so regulated as to take nearly all which he has to give, leaving him barely the means of continuing the cultivation of the soil. The advantage of the ryotwary system is, that it gets rid of the oppressions of the middle-men, and brings about a direct connection between the government and the bulk of the people, under which they enjoy a greater degree of security from oppression than accompanied a state of dependence upon their native landlords. The collectors appointed by the Company's government are persons of intelligence and respectability, who are doubtless anxious to perform the duties of their office uprightly. Unfortunately, however, owing to the heat of the climate, and the difficulty they find of transacting business in a foreign language, the collectors are obliged to employ natives under them, upon whom they must in a great measure depend for executing the details of the business; and it is too much to be feared that the cultivators do not meet with such consideration at their hands as they would doubtless experience were the collector himself capable of conducting every part of the business.

A modification of the ryotwary system is very commonly adopted in the Bombay presidency. This plan is known under the name of the *village system*. It is generally the case in India, that in every village or district there are a head man and an accountant, who manage affairs for the rest of the community. The head man goes by various names in different places. In Bengal he is called the *mocudum*, or *malik*; in Madras and Bombay he is called the *potail*; and the village accountant bears the name of the *gurnam*, or *putwarry*. The head man stands forward to make the engagement, and becomes answerable to government for the revenue, which, on the part of the village, he undertakes to pay. In many districts there are persons who claim to be hereditary managers for the villages. As the custom here described has long prevailed, and as the natives of India always prefer what is customary, simply because it is so, it is probable that the government would have some difficulty in wholly abolishing the village system. A new system, which promises well, has been introduced into the North-west provs. by which the lands belonging to a village are assessed and settled for periods of 20 and 30 years.

The land-revenue collected by the Company exceeds £14,000,000 per annum; and forms about two-thirds of the whole amount of its income, exclusive of mercantile profits.

The secondary sources of revenue are the duty on salt, the monopoly of the sale of opium, and sundry smaller duties, as the *abkarry*, or excise on the manufacture of spirits, licenses, sale of drugs, &c., the customs, canal-tolls, and stamp-duties. Besides these, there are subsidies or tribute receivable from certain native chiefs. The following is an abstract of the revenue and expenditure of the Indian government since 1829:

Year.	Revenue.	Charges.	Surplus.	Deficit.
1829-30	£14,629,388	£15,356,161	...	£726,773
1831	14,603,951	14,494,752	£109,199	...
1832	14,198,155	14,506,540	...	308,385
1833	13,955,042	14,219,374	...	264,332
1834	13,680,165	13,630,767	49,398	...
1835	14,387,258	14,880,741	...	493,483
1836	15,549,545	15,179,469	370,076	...
1837	15,214,798	14,017,118	1,197,880	...
1838	15,088,269	14,292,026	796,243	...
1839	15,313,091	15,046,232	...	306,241
1840	14,549,262	16,390,278	...	1,840,916
1841	15,133,822	16,887,330	...	1,753,408
1842	15,788,499	17,554,258	...	1,745,759
1843	16,419,991	17,766,104	...	1,346,173
1844	17,173,788	18,612,915	...	1,439,128
1845	17,293,305	18,036,819	...	723,514
1846	17,812,419	19,307,795	...	1,495,376
1847	18,653,145	...	...	971,202
1848	17,577,102	...	...	1,911,791
1849	18,227,065	...	...	1,473,115
1850	20,275,331	...	354,337	...
1851	20,249,932	...	415,866	...
1852	19,927,039	...	...	469,701

The total net revenues and receipts in India for the three years ending 1850-51, and the charges in India and England, were as follows:

	Net revenues.	Charges in India.	Charges in England.
1848-49	£18,227,350	£16,087,557	£3,012,908
1849-50	20,275,981	17,170,707	2,750,937
1850-51	20,250,330	17,117,478	2,717,186

The estimated charges for 1851 and 1852 are put down at £17,901,666, and the revenues at £19,927,039; this does not include the disbursements in England, which are estimated at £2,495,074, leaving a deficiency of £469,701 for that year. The total net revenues of India are made up of the following sums for the year 1850-51:

Bengal presidency,	£7,799,393
North-western provinces,	4,746,799
Punjab and Trans-Indus territory,	1,354,371
Madras presidency,	3,625,060
Bombay presidency,	2,744,950
Total net revenue of India,	£20,250,513

The above sum does not include a small amount produced from commercial assets in India and China.—In 1851-2, the receipts from the prov. of Sind were £254,000; the charges £439,000; loss in 1851-2 by the acquisition of Sind, £185,000. And as with Sind, so with Sattara; its receipts in 1851-2 were £205,000; its charges, £242,000; loss, £40,000 a year. By Sind and Sattara in 1851-2 the Indian government lost nearly £500,000; add the loss involved in the Punjab, and we have an annual burthen of about £1,500,000 sterling caused by these recent extensions of territory. The receipts from the six principal sources of revenue, and the charges of collecting each in the several years noted, were as follows:

## GROSS RECEIPTS.

	1843-4.	1844-5.	1845-6.
Land revenue,	£12,462,643	12,397,553	12,549,861
Sayer, Akberri, &c.,	890,379	856,455	893,627
Customs, including duty on salt,	1,984,737	1,900,999	1,959,339
Sale of salt,	2,137,320	1,192,666	1,877,262
Opium and opium passes,	2,473,843	2,670,738	3,354,377
Tobacco,	78,844	79,833	84,446



## CHARGES OF COLLECTION.

Land revenue, Sayer, Ak-herri, &c.,	1,604,600	1,603,346	1,565,716
Customs,	202,399	185,414	182,709
Cost and charges of salt,	596,597	589,254	517,278
Cost and charges of opium,	575,569	625,780	726,237
Cost and charges of tobacco,	25,473	21,674	18,873

The returns of the stamp-duties, the item of revenue next in importance, were:

	Gross receipts.	Charge of collection.
1843-4	£411,061	22,796
1844-5	417,430	23,239
1845-6	408,819	27,596

The income from the duty on salt has remained almost stationary since 1845, while the revenue derived from opium in the Bengal presidency has increased from 2,95,99,875 rupees per ann. in that year to 3,11,94,816 r. in 1850; or from about £2,774,000 to £2,924,000. In the Madras presidency the land-revenue has decreased since 1847 from 3,65,48,058 r. to 3,51,59,696 r. in 1850; or from £3,426,000 to £3,296,000. The sale of salt has also retrograded. In Bengal, this monopoly yielded in 1843-44, £1,840,000; in 1850, only £1,000,000. In the North-western provinces the land-revenues show a considerable increase between 1845 and 1850. The revenue at the former period was £4,220,000; in the latter it had increased to £4,678,000. In Bengal the land-revenue has oscillated between the years 1848 and 1852 from £3,500,000 to £3,560,000; in Madras from £3,640,000 to £3,470,000; in Bombay from £2,240,000 to £2,300,000. The cost of collecting the Indian revenue is very great. In Bengal a gross revenue of £10,000,000 is collected at the cost of £1,700,000. In the North-west provinces, gross revenues of £6,000,000 cost £500,000 in collecting. In the Punjab £170,000 is spent to collect £1,000,000; in Madras it takes £680,000 to collect £5,000,000; in Bombay £310,000 to raise £4,300,000; so that of a gross revenue of £27,000,000, nearly £3,400,000 are spent in collecting it. The expenditure on public works under the years noted was as follows:

	1843-4	1844-5	1845-6.
Buildings, roads, &c. (exclusive of repairs),	£170,504	135,294	169,443
Pilotage, &c.,	337,102	299,126	331,763

*Debt.*] On the 30th of April 1846, the territorial debt of the East India company in India amounted to 41,59,22,492 Company's rupees, or £38,992,734, bearing an average annual interest of 5½ per cent., which amounted to 1,96,24,453 company's rupees, or £1,839,772. There is no statutory limit to the extent of debt which the Company may incur on India. In the last year of the last Indian charter, the Indian debt was £35,463,483, bearing an interest of £1,754,545. On the 30th April 1850, the debt had accumulated to £46,908,064, and the interest to £2,236,140. The Indian revenue is now loaded, moreover, with the interest of what is supposed to have been the commercial capital of the old trading firm, and also with the interest of a commercial debt of that firm, the first of these having amounted in 1850-51 to £636,493, and the last to £144,979. With these new liabilities, the capital of the Indian debt will be £63,832,539, and the yearly interest £3,017,612. The interest charged on the debts of each presidency in 1845-6 and 1850-51, was as follows:

	1845-46.	1850-51.
Bengal presidency,	£1,699,000	£2,097,216
North-western provinces,	2,602	37,475
Madras presidency,	70,470	51,986
Bombay presidency,	55,113	68,792
Total interest on debt,	£1,827,185	2,255,466
		1,827,185
Increase,		£428,284

The capital debts of each presidency are given in the following return, by which it will be seen that the total amount is £47,999,827, at a rate of interest ranging from 4 to 10 per cent.:

	Debts.	Rates of interest.	Annual amount of interest.
<b>I. BENGAL.</b>			
Registered debt.	Co.'s rupees.		Co.'s rup.
Loans,	1,10,55,697	6 per cent.	6,63,342
Ditto,	28,84,28,493	5 per cent.	1,44,21,424
Ditto,	15,38,74,708	4 per cent.	61,54,988
Co.'s rupees,	45,38,58,898		2,12,39,754
Loan transferred from Fort Marlborough,	8,972	10 per cent.	897
Treasury notes,	84,95,049	aver. 5 per ct.	4,26,363
Civil and medical funds,	2,04,85,047	6 per cent.	12,29,102
Miscellaneous deposits,	9,85,208	5 and 4 per ct.	41,083
Co.'s rupees,	48,33,33,174		2,29,37,199
<b>II. NW PROVINCES,</b>			
(Including the newly acquired territory.)			
Miscellaneous deposits,	2,00,000	4 per cent.	8,000
Temporary loans,	37,33,000	5 per cent.	1,86,650
Co.'s rupees,	39,33,000		1,94,650
<b>III. MADRAS*</b>			
Loans,	1,54,000	8 per cent.	12,320
Ditto,	80,500	6 per cent.	4,330
Civil, military, and medical funds,	66,82,765	6 and 5 per ct.	3,80,032
Miscellaneous deposits,	6,01,975	6, 5, and 4 per ct.	26,438
Treasury notes,	36,500	4 per cent.	1,460
Fund for the redemption of the bonds issued to the creditors of the late rajah of Tanjore,	28,11,894	4 per cent.	1,12,476
Co.'s rupees,	1,03,67,634		5,37,566
<b>IV. BOMBAY.</b>			
Civil annuity and other service funds,	59,36,032	6 per cent.	3,56,162
Civil provident and military funds,	76,06,303	5 per cent.	3,80,315
Miscellaneous deposits,	7,98,514	4 per cent.	31,940
Treasury notes,	23,500		940
Co.'s rupees,	1,43,64,349		7,69,357
Total Co.'s rupees,	51,19,98,157	Co.'s rupees.	2,44,58,762
At 2s. per Sicca rupee,	£47,999,827		£2,291,134

*Military force.*] The troops in India belong partly to the British government, and partly to the East India company. The force is always considerable; and in time of war the Anglo-Indian army has been rendered very formidable. The strength of this army, in efficiency, consists of Europeans, whose skill in military tactics gives them a decided superiority in every contest. The sepoys are natives, enrolled and disciplined in the European manner. The grand total of the British military force in India, in October 1825, exceeded 300,000 men, viz.:

Artillery,	15,782
Native cavalry,	26,094
Infantry,	234,412
Engineers,	4,575
	280,865
King's troops,	21,934
Grand total,	302,797

Of these the irregulars of all descriptions amounted to 82,937 men.—In 1830, the military force employed at the three presidencies and subordinate settlements in India amounted to 224,444 men, and its expense to £9,474,481.—In 1837, the total effective force maintained in India was 295,840 men, of whom 26,582 were British. In 1851 the total strength of the Bengal army was 167,199 men, and 225 guns.—This formidable army is distributed throughout II.

under the orders of the supreme government, promulgated through its political agents. Commencing from the great station in the doab of the Ganges, one corps is stationed at Ajmir, another at Neemutch, and a third at Mow, all which stations are supplied from the Bengal army. A force of 66,589 men and 129 guns was mustered in the Punjab in 1851, and the Strhind division amounted to 23,408 men. These are succeeded by the Gujerat subsidiary forces, the field corps at Mulligaum, and the Punah division, furnished chiefly by the Bombay army. The circle is further continued by the field-force in the southern Mahratta country; the Hyderabad and Nagpur subsidiaries, composed of Madras troops; and detachments from the Bengal establishments forming the Nerbudda and Sangur divisions. At Mirut, Allahabad, Benares, and Dinapore, strong divisions are maintained. Such is the general outline, liable, of course, to temporary modifications, and occasional change in the selection of stations. The officers in the Company's service receive commissions from Her Majesty corresponding with those which they receive from the East India company. Westward of the Cape of Good Hope, the Company's officers possess no rank when on service with the queen's officers; eastward of it they take precedence according to date and rank of commission. Every officer who has actually served 22 years in India is permitted to retire from service with £360 pay if a captain; £290 as commander; £190 as lieutenant or purser. An officer retiring from ill health, after 10 years' service, has £200 per ann. of retiring allowance as a captain; £170 as a commander, and £125 as a lieutenant. The officers for the Company's artillery and engineers are educated at Addiscomb college, near Croydon.

*Marine force.*] The Indian naval establishment is attached to the Bombay presidency, and consisted in 1830 of 18 gun ships, 610 gun corvettes, 2 armed steamers, and some surveying vessels. In 1844-5 it consisted of 4 vessels mounting in all 48 guns, and 4 steam frigates mounting in all 20 guns.—The pilot-service,—the best formed of its class in the world,—consists of 12 strong well-fitted vessels of 200 tons burthen; with 12 branch-pilots, 24 coasters, 24 first mates, and 24 second mates. The Company had 23 steam vessels of a total power of 2,770 horse-power in 1845-6.

*Mails to and from England.*] At present the Peninsular and Oriental steam-ship company maintains a monthly mail between England, Ceylon, Calcutta, Singapore, and Hong-Kong; for which they receive £90,000 per ann. from government; and £70,000 per ann. from the East India company. The duration of the voyages of this Company, under ordinary circumstances, is to Aden, 27 days; to Bombay, 35; to Ceylon, 41; to Madras, 45; to Penang, 46; to Calcutta, 48; to Singapore, 49; to Hong-Kong, 55. The steamers of this Company are from 400 to 520 horse-power; and cost from £50,000 to £90,000 each. The vessels for Alexandria sail on the 20th of each month, and arrive at Alexandria on the 9th of the following month. At Suez, at the head of the Red sea, an East India company's steamer is in waiting to convey the passengers and mails to Bombay; and another steamer, the property of the Peninsular and Oriental company, is also in waiting for the mails to Ceylon, Madras, and Calcutta. The two steamers sail down the Red sea in company; but their routes diverge at Aden, 1,308 m. from Suez; the Oriental steamer holding nearly due E. to Point-de-Galle in Ceylon, where she exchanges mails with the China steamer, and then stretches along the Coromandel coast to Madras and thence to Calcutta, where she arrives in 28 days from Suez.

*NATIVE STATES.*] The political relations of the E. India company are of three kinds. In the first class may be placed those States with which they hold only foreign relations, such as Cabul, Sennaa, Siam, and Acheen. A second class embraces the frontier states of Ava, Nepal, Tibet, Afghanistan. The third and more important, embraces the political relations of the government of India to internal States within the frontiers of H. These latter States may be divided into 6 classes:

The 1st class embraces those States with which the Company has treaties offensive and defensive, conferring a right on the States to claim protection, and on the Company to interfere in their internal affairs when thought necessary. To this class belong:

	Area
1 Oude, . . . . .	23,522 sq. m.
2 Mysore [now annexed], . . . . .	27,999
3 Berar, . . . . .	56,723
4 Travancore, . . . . .	4,573
5 Cochin, . . . . .	1,587
	115,204

To the 2d class belong such States as likewise hold treaties offensive and defensive with the Company; but which do not concede the right to the Company to interfere further than to aid in levying the revenue of their chiefs. They are 3 in number, viz.:

	Area
1 Hyderabad, . . . . .	88,887 sq. m.
2 Baroda, . . . . .	5,525
3 Kattiwar, or Gujerat, . . . . .	19,424
	113,836

To the 3d class belong those States which are tributary to the Company, and acknowledge its supremacy, but whose chiefs are supreme in their own territory. These are:

	Area
1 Indore, . . . . .	4,245
2 Odipur, . . . . .	14,784
3 Jypur, . . . . .	13,426
4 Judpur, . . . . .	34,121
5 Kotah, . . . . .	4,388
6 Banewarra, . . . . .	1,440
7 Pertabgurh, . . . . .	1,457
8 Dungurpur, . . . . .	2,004
9 Kerauli, . . . . .	1,873
10 Serawi, . . . . .	3,024
11 Bhurtupore, . . . . .	1,945
12 Bhopal, . . . . .	6,772
13 Cutch, . . . . .	7,395
	93,889
14 Dhar, . . . . .	93,889
15 Dholpur-Bari, . . . . .	1,465
16 Rewah, . . . . .	1,025
17 Dhuttia, . . . . .	10,310
18 Jansi, . . . . .	16,173
19 Tirih, . . . . .	934
20 Sawuntwari, . . . . .	2,291
21 Bihondi, . . . . .	18,059
22 Bikanir, . . . . .	9,779
23 Jesalmir, . . . . .	3,244
24 Alwar, . . . . .	724
25 Kishingur, . . . . .	158,483

With a 4th class of States the Company has entered into treaties of guarantee and protection, with supremacy in their own territory, and subordinate co operation. These are:

	Area
1 Tonk, . . . . .	1,103 sq. m.
2 Serongt, . . . . .	262
3 Nimbera, . . . . .	269
4 Puttiala, . . . . .	16,602
5 Keytal, . . . . .	16,602
6 Daba, . . . . .	16,602
7 Jhind and other small Sikh states, . . . . .	18,236

The 5th class, comprising States with which the Company holds treaties of amity and friendship, comprises only one state, viz.:

Scindia or Gwalior, . . . . .	32,944 sq. m.
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The 6th class comprises States which hold treaties of protection giving a right to the Company to control their affairs. These were:

1 Sattara (since annexed), . . . . .	7,943
2 Kolapora, . . . . .	3,184
3 Delhi, . . . . .	3,184
	14,311

*General recapitulation.*] The following table, which exhibits the area and pop. of the different territories and states of India, though made up from the latest materials in our possession, must be regarded as a mere approximation:

## I. BRITISH TERRITORY.

	Area in square miles.	Population.
I. PRESIDENCY OF BENGAL.		
1 Province of Bengal,	76,000	25,000,000
2 " Bahar,	45,000	12,000,000
3 " Orissa,	20,000	3,000,000
4 Ultra-Gangetic provinces,	42,000	350,000
	183,000	40,350,000
II. SUB-PRESIDENCY OF AGRA.		
1 The 24 Collectorates,	81,000	15,270,000
2 Additional districts in Gundwana, Oude, Bundelcund, Ajmir, the Rohilla districts, Kumaon, Bissahir, and the Doab,	90,000	5,000,000
	171,000	20,270,000
III. PRESIDENCY OF MADRAS,	128,000	17,000,000
IV. PRESIDENCY OF BOMBAY,	68,000	7,000,000
V. THE PUNJAB,	100,000	3,000,000
VI. SIND,	60,000	200,000
	710,000	87,820,000
To the above may be added the recently annexed territories of Mysore and Sattara,	36,000	3,600,000
	746,000	91,420,000

## II. SUBJECT STATES.

1 Nizam of Hyderabad,	88,900	10,000,000
2 Rajah of Berar,	57,000	3,500,000
3 King of Oude,	24,000	5,000,000
4 Ras of Cutch,	7,400	350,000
5 Rajah of Rewah,	10,310	1,030,000
6 Rajah of Travancore,	4,600	500,000
7 Rajah of Cochin,	2,000	200,000
8 Rajah of Kolapore,	3,200	320,000
9 Rajah of Sawuntwari,	1,000	95,000
10 Rajah of Sikkim,	4,400	440,000
11 Chiefs of Dhurtia, Jansi, Tirhi, and others, in Bundelcund,	17,000	2,000,000
12 Rajah of Bhurtipore,	2,000	195,000
13 Rajahs of Dhulpur-Bari,	1,650	163,000
14 Nabob of Bhopal,	6,800	700,000
15 Holcar's territories in Malwah,	4,250	425,000
16 Rajahs of Dhar and Dewas,	1,500	150,000
17 The Guicowar of Baroda,	5,600	800,000
18 Chiefs of Gujarat,	20,000	1,200,000
19 Sikh rajahs of Pattiala, Keytul, Duba, Jhind, and other districts between the Jumna and the Sutledge,	16,600	500,000
20 Daudputra chiefs and Bhawalpur,	18,000	350,000
21 Rajput provinces in Rajputana and Malwah, viz.:		
Mewar or Odipur,	11,800	1,178,000
Jypur,	13,500	1,400,000
Marwar or Judpur,	35,000	1,700,000
Kotah,	4,400	440,000
Bhondi,	2,300	230,000
Alwar,	3,800	324,000
Bikanir,	18,000	180,000
Jesalmir,	10,000	100,000
Kishimgur,	780	72,000
Banswarra,	1,440	144,000
Pertaubghur,	1,500	145,700
Dungarpur,	2,000	200,000
Kerauli,	1,900	188,000
Serawi,	3,000	300,000
Chief of Tonk, Serongi, and Nimbhera,	1,700	164,000
22 Sikh sirdars in Delhi,	18,000	500,000
23 Maharajah of Cashmere,	5,000	500,000
	129,570	11,725,700
	225,780	39,643,700

## III. INDEPENDENT STATES.

	Area in square miles.	Population.
1 Maharajah Scindia or Gwalior,	33,000	3,500,000
2 Kingdom of Nepal,	36,000	2,000,000
3 Deb-rajah of Bhotan,	20,000	1,000,000
	89,000	6,500,000



## IV. OTHER EUROPEAN TERRITORIES.

1 French territory,	530	178,000
2 Danish,	93	35,000
3 Portuguese territories of Goa, Damao, and Diu,	1,200	350,000
	1,823	563,000

## RECAPITULATION.

I. BRITISH STATES,	746,000	91,420,000
II. SUBJECT STATES,	425,780	39,643,700
III. INDEPENDENT STATES,	89,000	6,300,000
IV. OTHER EUROPEAN TERRITORIES,	1,823	563,000
	1,262,603	137,926,700

*History.]* The history of H. may be divided into three heads; viz., the ancient history,—the Mahomedan history,—and the history of the establishment and progress of European colonies in the country.

The ancient history of H. reaches to a very great antiquity; but the only events prior to the birth of Christ of which we possess any clear information, are the invasions of India by Sesostris, the great war of the Mahabharat, and the successive invasions by Darius Hystaspes, by Alexander the Great, by Seleucus, and by Antiochus the Great. The sanguinary war which forms the subject of the epic poem called the *Mahabharat*, is calculated to have taken place about 1,200 years before the Christian era, and was distinguished by the political and religious changes which it produced. It was carried on by Krishna and his brother Ball Rama, against Jara Sandha, who reigned in Magadha, and who was surprised and slain in his capital. The conqueror raised himself, along with his brother, to the sovereignty over vast provinces, and were subsequently conjointly worshipped as one incarnation of Vishnu. Of the invasion of India by Sesostris, nothing is known, beyond the fact itself as mentioned by Diodorus Siculus. Dr. Robertson, indeed, doubts whether any such invasion ever took place, and ranks the exploits of Sesostris with the fabulous ones of Bacchus and Heracles. Under Darius Hystaspes, the Persians, about 500 B. C., overran a part of India Proper, and imposed upon its princes an annual tribute of 300 talents of gold. Before this event, dissensions had arisen among the different states of H., which invited the inroads not of the Persians only, but also of the barbarians of Tibet, who attacked and laid waste the northern provs.; and at the era of the invasion of Alexander the Great, the nations of the peninsula were separated from the eastern kingdom of the Prachii, which comprehended the modern Bengal, Bahar, and part of Oude. It is admitted by a Hindu writer, that the ostensible cause of the invasion of India by Alexander the Great, was to enforce the tribute of Darius Hystaspes, and to compel the Indian princes to acknowledge the supremacy of Persia. After having subdued several small states on the banks of the Indus, Alexander passed the different rivers of the Punjab, attacked Porus, the king of that district, who had collected a numerous army on the banks of the Hydaspes to oppose him, and obtained a decisive victory over that prince. He then resolved to push forward to the Ganges, but his troops had suffered so much from the excessive rains and inundations, that their patience as well as strength was exhausted, and on the banks of the Hyphasis, the modern Beyah, that conqueror was obliged to abandon his schemes, and to issue orders for marching back to Persia. He left behind him some troops, for the purpose of keeping possession of the conquered territory on the banks of the Indus, but his death, which happened shortly after, hastened the downfall of the Persian power in India. It was not, however, immediately annihilated. Seleucus, who obtained Upper Asia on the death of his master, marched into those countries of Asia which had been subdued by Alexander, partly with a view of establishing his own authority there, and partly to curb Chandragupta, or Sandracottus, king of Maghada, who had offered his assistance to the western princes against the neighbouring dominions of the Macedonians. The particulars of this invasion are obscurely and differently related; but it would seem that no decisive success was gained by either party, as a treaty was concluded, in which Seleucus gave his daughter in marriage to Chandragupta, who in return agreed to furnish Seleucus annually with fifty elephants. To confirm and perpetuate this amicable arrangement between the two monarchs, Seleucus sent Megasthenes, one of his officers, to reside at Palibothra, the capital of Maghada. After the embassy of Megasthenes, we hear no more of the affairs of India until the time of Antiochus the Great, who, nearly 200 years after Seleucus, made a short incursion into the country. The successors of Antiochus appear, soon after his death, to have abandoned their Indian possessions. The throne of Maghada, after the death of the grandson of Chandragupta, is stated to have been successively filled by seven Maurya kings of the family of Chandragupta, and ten of the Suryavarsha family. The eighth of the latter dynasty, Vicramaditya or Bickernajit, by a series of bold exploits attained the supreme sovereignty of India, in 56 B. C. His reign forms a splendid era in the Hindu annals, and the Hindus evince their respect for the memory of this prince, by calculating their civil time from the period of his inauguration. Maghada had originally comprehended

Southern Bahar only. Under the government of the Andharas it was again reduced to its original limits, and it finally sunk in power before the kingdom of Gaur or Bengal, which rose to be the first sovereignty in India, under distinct Maharajahs or great chiefs. Orissa, Gujerat, and the provs. of the Peninsula, had also their dynasties, their civil contests and petty revolutions, of which it would be useless to attempt a succinct narrative.

*Mahomedan history.]* In the reign of the Kalif Walid, the Mahomedans first obtained possession of Sind, whence they made frequent incursions into the neighbouring provs. Subuc-tag, after having subdued the fortresses of Bost and Kosdair, carried his arms across the Indus, and ravaged the Punjab, but he made no permanent acquisitions in that direction, and formed no establishment in H. To his son, the celebrated Sultan Mahmud Ghiznavi, by whom the glories of his house were raised to their zenith, belongs the reputation of first establishing the Mahomedan power in India. Mahmud, equally influenced by the love of conquest, and a desire to exterminate the Hindu religion, invaded India, A. D. 1000, and reduced the prov. of Multan. In 1011, he reduced Delhi; and in 1024, the whole peninsula of Gujerat. At his death, in 1028, his possessions, forming the empire of Ghazni, embraced the eastern and larger part of Persia, and the Indian provs. from the W of the Ganges to Gujerat, with those between the Indus and the mountains of Ajmir. In 1158, the empire, which had been brought to rapid maturity by the talents and successes of Mahmud, began to fall to pieces. The western part was seized by the Gauri, while that contiguous to the Indus remained in the possession of Chusero, whose capital was Lahore. In 1194, Chusero's sons were expelled by the Gauri. In 1194, Mahomed Gori penetrated into H. as far as Benares. His death, in 1205, occasioned a new division of the Ghaznian kingdom; the Persian part became subject to Eldoze, and the Indian to Cuttub, who founded the Patan or Afghan dynasty in H. Cuttub made Delhi his capital; and in 1216, his successor, Alt-mush, reduced the greater part of H. Proper,—his empire extending from the mountains of Tibet to that part of the Deccan which lies in the lat. of 20° N. and from the Indus to the Ganges. This monarch was contemporary with the celebrated Mogul, Gengis Khan, who put an end to the Karasmanian dynasty of Ghazni, which had succeeded the Gaurian, and overran all Asia to the northward of the lat. of 30°. In 1265, the kingdom of Malwa, which had been reduced by Cuttub, shook off the yoke; and the rajpoots revolted.—From this period almost to the time that the British government commenced, India presents a continued series of wars and revolutions. The Moguls made such frequent and formidable invasions, that in 1292 Feroze II. allowed them to settle in the country. In 1397, the famous Timur Bek, or Tamerlane, after subduing all the W of Tartary and Asia, invaded H., and rapidly penetrating to Delhi, soon completed the subjugation of the country. Delhi was sacked, its palaces and temples burned, and an immense number of the inhabitants massacred by this cruel conqueror. He may be said, however, rather to have overruled than to have reduced and conquered it; for he did not disturb the order of succession in H., but reserved to himself the possession of the Punjab only. Baber's first expedition was in 1518; and in 1525 he took Delhi, and proclaimed himself emperor of H., thus establishing the Mogul dynasty. He reigned, however, only five years; and on his death, his son was obliged to take shelter for a time among the rajpoot princes of Ajmir. The reign of Acher, his grandson, which lasted 51 years, was the most brilliant and prosperous in the history of the Mahomedan empire of India. Under his son and successor, Selim, who assumed the appellation of Jehanghire, the empire continued to prosper. It was in this reign that the first English ambassador was sent to H. Jehanghire died in 1628, and was succeeded by his son, Shah Jehan, who pursued the conquest of the Deccan with great vigour. This monarch had four sons,—Dara, Sujah, Aurangzebe, and Morad,—among whom, even before the death of the father, bitter contests arose for superiority, which ended in the final triumph of Aurangzebe, who seated himself, without a rival, on the throne, in 1660. He died in 1707, after a reign of 52 years. Under him the Mogul empire reached its utmost limits, comprehending the country from the 10th to the 35th degree of lat., and nearly as many degrees of long. His wealth was immense. "His revenue," says Major Rennel, "exceeded £32,000,000 sterling, in a country where provisions are about four times as cheap as in England. But so weighty a sceptre could be wielded

only by a hand like Aurengzebe's; and accordingly, in 50 years after his death, a succession of weak princes and wicked ministers reduced this astonishing empire to nothing! He left four sons, Mauzum, after defeating his brothers, reduced the Sikhs, a sect of religionists who had established themselves along the foot of the eastern mountains. He died at Lahore in 1712, leaving also four sons, among whom a contest for the succession again arose. Mahomed Shah, who was raised to the throne in 1720, acquired his full and legitimate power by defeating the Sikhs. But a new enemy, more formidable than either the Sikhs or the Mahrattas, started up in the person of Nadir-Shah, the celebrated Persian conqueror, who, after the capture of Candahar in 1737, marched to the eastward, and entering H., took Ghazni, Cabul, and Peshawer, and crossing the Indus near Attock, reduced the Punjab, took Lahore, defeated Mahomed near Carnaul, and marched to Delhi. The Mogul empire now became a prey to all the neighbouring states that were sufficiently powerful to attack it. Bengal became independent of Delhi, under Aliverdy Cawn. The Rohillas erected an independent state on the E of the Ganges, within 80 m. of Delhi. The Jauts, a Hindu tribe, established themselves, and founded a state in the prov. of Agra. The Deccan was usurped by its viceroys, Nizam. Oude, which had remained attached to the throne of Delhi, was seized upon by Seifdar-Jung; Allahabad by Mahomed Kooli. Malwah, which had been invaded and overrun by the Mahrattas in 1707, was finally separated from the Mogul government about 1732, and divided between the Poonah Mahrattas and several native princes. The Mahrattas also obtained the greater part of Gujerat, Berar, and Orissa, besides their ancient territories in the Deccan. Ajmir had never become a regular organized possession of the Mogul empire, like Agra and Delhi, though it continued under nominal subjection; but about 1748 it assumed total independence, and reverted to its ancient masters, the Rajpoot princes. The Sikhs also took advantage of the weakness of the Mogul empire, and in 1746 made themselves masters of a considerable part of the Doab of Ravy and Jallinder. "Thus," says Major Rennel, "the whole country of H. Proper was in commotion from one extreme to another, each party fearing the machinations or attacks of the other; so that all regular government was at an end, and villany was practised in every form. Perhaps in the annals of the world it has seldom happened that the bonds of government were so suddenly dissolved over a portion of country containing at least 60,000,000 of inhabitants."

*History of British India.]* The Venetians were the first Europeans who traded extensively with India before the discovery of a passage to it by the Cape of Good Hope, in 1497. The political situation of the leading European nations, all engaged more or less in ruinous wars, long left the Portuguese undisturbed in the enjoyment of those advantages which their discovery and exertions had secured to them. In the reign of Elizabeth, a body of English merchants petitioned that queen to grant them encouragement and exclusive privileges for the purpose of carrying on a trade with India. Elizabeth, on the 31st of December 1600, granted a charter erecting the petitioners into a corporation, under the title of 'the Governor and Company of Merchants of London trading to the East Indies.' By this charter—the origin of that important and anomalous power which has since grown up under the name of the East India company—the corporation was invested, for a period of 15 years, with the privilege of an exclusive trade "into the countries and parts of Asia and Africa, and into and from all the islands, ports, towns, and places of Asia, Africa, and America, or any of them, beyond the Cape of Bona Esperanza, or the straits of Magellan, where any traffic may be used, and to and from every of them." The commercial history of the rise and progress of this Company has been already detailed. In 1611, the English fleet off the coast of India was attacked by a large Portuguese armament, but made a triumphant defence; and the Mogul emperor allowed the English to establish factories at Surat, Ahmedabad, Cambaya, and Goga, by firmans, on the 11th Aug. 1612. In 1614, Sir Thomas Roe was sent as the first British ambassador to the Mogul, from whom he obtained considerable privileges for the Company. About the same time the Zamorin of Calicut granted them similar privileges. In 1640, the English first effected a settlement at Madras. In 1634, they obtained from the court of Delhi the privilege of free resort to the port of Piply, in Bengal. The professional skill of a surgeon named Boughton, belonging to one of the Company's ships, who had the good fortune to cure the daughter of the emperor Shah Jehan of a severe illness, secured the favour of that monarch and of the nabob of Bengal. On the payment of 3,000 rupees, a license was given for an unlimited trade without demand of customs, and factories were established in Bengal. In 1661, a new charter was obtained from Charles II., who ceded to the Company the island of Bombay and the island of St. Helena. The supreme seat of government, which had hitherto been at Surat, was transferred in 1687 to Bombay. Madras was at the same time formed into a corporation, governed by a mayor and alderman. In 1698, Azim, one of the grandsons of Aurengzebe, who commanded the Mogul army in Bengal, was bribed by the English to confer on them a grant of the three connected villages of Chuttnutte, Gorindpore, and Calcutta, together with a judicatory power over the inhabitants. Shortly afterwards, the fortifications of the new possessions being completed, received the name of Fort William; and about the same period the agency of Bengal was elevated to the rank of a presidency. For some years the position and relative constitution of the British presidencies fluctuated much; but Bombay at last superseded Surat; and from the date of the building of Fort

William, the established presidencies were those of Madras, Bombay, and Bengal. The peace of Aix la Chapelle, in 1748, terminated those direct hostilities which the French and English had long carried on in India; but the armies which both states maintained at that period continued to assist different native princes, with the view, doubtless, on each side, of ultimately obtaining such a position as would make their power, on the renewal of a contest, paramount to that of their rival. The territory of the Carnatic, within the jurisdiction of which both Madras and Pondicherry were situated, was one of the subordinate principalities immediately governed by nabobs, but subject to the subadar of the Deccan, who was still regarded as a feudal prince under the Mogul emperor. On the death of Nizam-ul-Mulh, the subadars of the Carnatic was disputed between his son Nazir and his grandson Murzafa. At the same time the nabob of the Carnatic, Anwaraadin, who had been regularly established in that office by the nizam, was opposed by Chunda Sahib. The latter and Murzafa made common cause; and M. Duplex, the French governor of Pondicherry, a man of talent, intrigue, and ambition, lent them his aid. The combined troops of the French and the two princes overthrew those of Anwaraadin in a pitched battle, in which he himself was slain, and his eldest son taken prisoner, while his second, Mahomed Ali, escaped and obtained the assistance of the English. Thus commenced the Carnatic war, which was in reality a contest between the European powers for superiority in H. It was during this war that Mr. Clive, afterwards Lord Clive, commenced his brilliant career. On the breaking out of the seven years' war between England and France, in 1756, fresh fuel was added to the contests in India. At first the French captured several of the subordinate English factories, and even laid siege to Madras. But the arrival of reinforcements from Europe succeeded in turning the fortunes of war; Pondicherry was taken; and Mahomed Ali established in his principality. Salabut Jung, the third son of the nizam, who had been raised to the musnud of his father by the assistance of the French, at length obtained an accommodation with the English, in return for which they received from him a grant of the possessions which their victories over the French had given them, namely, the circar of Masulipatam and its districts, and the circar of Nizampatam. While the English were thus successfully establishing themselves in this part of India, they were obliged to detach a force to the succour of their interests in Bengal. Surajah Dowlah, who had, in 1756, succeeded to his grandfather, Aliverdy, nabob of Bengal and its dependencies, had at first shown himself favourable to the British. At length, however, he invested and made himself master of Calcutta. Clive, with his forces, now embarked for Bengal; and arriving in December, commenced their operations with vigour and success. Calcutta, Fort William, Tanna, and Buxbudi, were quickly retaken; and on the 23d of June in the following year, was fought the famous battle of Plassey, by the issue of which Mir Jaffier gained the nabobship of Bengal, and his English allies a large treasure, and a portion of territory adjoining to Calcutta. Jaffier was speedily deposed by the same power which had placed authority in his hands, and Mir Causim his son-in-law invested with the dignity of nabob. Mir Causim had not been long possessed of the nabobship when he entered into projects unfavourable to the English; levying high duties on their merchandise; and even putting to death the English deputies who were sent to him to adjust matters. It was now resolved to restore Mir Jaffier to the dignity from which he had been degraded. On the 7th of June, 1763, he was proclaimed subadar of three provinces, and war was declared against Causim, who, after a brave resistance, abandoned by his army, and deprived of every fortification which he had possessed, fled to Sujah Dowlah, nabob of Oude, at that time viceroy to the mogul. The British were now masters of Bengal; for the sovereignty conferred on Jaffier was merely nominal. But Dowlah managed to maintain a vigorous resistance to the British arms; and Lord Clive, convinced that to exterminate the power of Dowlah was to destroy the strongest barrier of the Company's possessions against the incursions of the Mahrattas, reinstated him in his dominions, except a small district which was ceded to the mogul. To the Company's officers was reserved the power of collecting the revenues of Bengal, and all its dependencies,—a stipulation which constituted them the real sovereigns. Of this revenue, they were to be accountable for 20 lacs of rupees, or £225,000, to the mogul; and 53 lacs of rupees or £596,250, to the nabob of Bengal. The remainder was to belong to the funds of the Company. Notwithstanding what was called the successful event of this eastern contest, and notwithstanding the extension of the Company's territories and the great augmentation of their nominal revenues, its affairs were now in reality so embarrassed, that the interference and assistance of the British parliament was solicited; the ministry made use of their interference for the purpose of subjecting the Company's territorial possessions to the authority of the Crown; and thus, without a struggle, assumed a sovereignty to which, perhaps, their title was no less valid than that of the Company.

*Hyder Ali.]* The British in India were not long allowed to enjoy that tranquillity which Clive had procured for them. Hyder Ali, an adventurer, who, by his daring activity and energetic policy, had raised himself from the condition of a sepooy to the rank of a prince, conceived designs of extending his power still farther, and, if possible, driving the British out of India. He entered into and maintained an almost uninterrupted series of conflicts with the English, with varying fortune until his death in December 1782, at an age exceeding 80.

*Tippu Sahib.*] In 1783, the English forces made an expedition into the territory of Canara, that part of Hyder's dominions for which he had evinced the greatest partiality. Hyder no longer existed to check their efforts; but Tippu, his son and successor, inherited too much of his father's activity to permit the British unmolested to ravage his dominions. In a short time, the invading army was invested in Bednore, the capital of Canara, by an Indian army consisting of 150,000 men, and obliged to capitulate. Tippu was, without doubt, the most powerful of all the Indian princes. His dominions were equal in extent to Great Britain; his revenue was computed at £4,000,000; and his military establishment consisted of about 150,000 men. With these means, he maintained a vigorous resistance to the British arms, but in 1792 was compelled to cede one-half of his dominions to the British and their allies. The French expedition to Egypt—which was imagined to be only a preparatory step to an expedition to India—confirmed the suspicions which the British had so long entertained; and suggested the necessity of immediately crushing Tippu. On the 8th of November, 1798, the Marquis Wellesley, governor-general of India, in order to bring the sultan to an open declaration of his sentiments, informed him, by letter, that his connection with the French was no longer a secret, and desired him to receive Colonel Doveton at his court, in order that such negotiations might be entered into as should terminate all existing differences. The sultan affirmed that he had formed no connection with the French, and expressed his surprise at the warlike preparations which were daily making. Whatever plausibility was in Tippu's assertions, the governor-general reckoned them unsatisfactory; and the British army, unwilling to allow Tippu, under pretence of negotiation, to prepare for a vigorous defence, advanced with rapidity into his dominions; and General Harris continued his march, till he came within sight of Seringapatam. The sultan now offered to capitulate: but the only terms offered him were, that half of his territories should be delivered to the allies; that he should pay two crores of rupees; that every Frenchman should be dismissed from the service; that he should receive ambassadors from the British and their Indian allies; and that four of his sons, and four of his chief officers, should be delivered as hostages, for the performance of the stipulated conditions. Convinced that he could no longer hope to obtain peace without completely sacrificing his dignity and his power, he formed the resolution of defending his capital to the last extremity, and of falling with the ruins of his empire. On the 2d of May, 1799, the works of the besiegers were completed. On the 4th the breach was judged to be practicable, and the assault, conducted by General Baird, commenced early next morning. To save the life of the sultan, a flag of truce was despatched to his palace; but Tippu disdaining to shrink from the combat, continued to encourage his soldiers by his presence, and to rouse them to exertion by his example, till he fell in a gateway on the N side of the fort, surrounded by the dead bodies of his attendants. With Tippu ended the powerful kingdom of Mysore; and by its fall the designs of France against the British empire in India were totally frustrated. Of his territories the East India company obtained the province of Canara, the district of Coimbatour and Duramporam, the country situated between the British possessions in the Malabar and those of the Carnatic, the forts and posts constituting the passes above the Ghauts on the table-land of Mysore, and the island, city, and fortress of Seringapatam. The nizam acquired the districts of Gutti and Gorurcondah, with a territory upon the line of Chittledrug, Sera, Nundidrug, and Colar. Though the Maharrattas had taken no active part in the war, political motives induced the British to grant them Harponelly, Supda, Chittledrug, and part of Bidnur. The relations of Tippu were transported to the Carnatic; and a descendant of the ancient rajahs of Mysore, of five years of age, was sought out, and elevated to the nominal sovereignty.

*War with Sindia, Holkar, &c.*] The peshwa, or chief magistrate of the Maharratta states, had long been the ally of the British, but his power and authority were in a great measure usurped by the military chieftains, Sindia, the rajah of Berar, and Holkar. To avoid destruction from their hands, he threw himself upon English protection; and on the 31st of December, 1802, a treaty offensive and defensive was concluded between him and the British, in which the latter engaged to support his authority, and to restore him to the throne of Punah. On his part, the peshwa ceded to the Company a portion of his territories yielding a revenue of 2,000,000 rupees, to defray the expenses of the war, and as a compensation for the assistance to be lent him. A sufficient force under the command of General Wellesley was collected and in motion to conduct the peshwa to his capital, where he arrived on the 14th May. Sindia now raised a numerous army, which he placed in a situation which threatened the security of the British dominions. Holkar, and the rajah of Berar, were without difficulty engaged in the confederacy, which was also encouraged to look forward to French assistance. A force, however, more formidable than ever Britain had mustered in India, well provided, and supplied with every necessary, stood ready to counteract all the plans of their enemies. It amounted to about 50,000 men, besides pioneers, gun lascars, and persons belonging to the stores and ordnance service. The Maharratta army, or rather the army of the confederates, was also very formidable, particularly as it was under the discipline and conduct of several French officers, the most distinguished of whom was M. Perron, who had the power of making treaties in his own name. That under Dowlat Row Sindia, and the rajah of Berar, amounted to 24,000 infantry, and 38,000 cavalry, with 210 pieces

of artillery; and that under M. Perron, to 43,650 men, infantry, and cavalry, with 464 pieces of artillery. Perron undertook to penetrate into the British possessions, along the valley of the Ganges, by Lucknow and Allahabad; and was opposed by the British forces under Lord Lake. The forces under Sindia and the rajah of Berar, were intended to march upon Bombay, and were opposed by General Wellesley. Early in August, 1803, active operations were commenced against the Maharratta states. On the 8th, Sir Arthur Wellesley commenced his operations against Ahmednagar, an important fortress in the province of that name, and on the 28th of September, he came up with the united forces of Sindia and the rajah, encamped on the N side of the Kristna, their line extending from that river to the village of Assaye. An attack immediately commenced upon the enemy's left, and after a terrible contest, the enemy's line gave way in all directions, and the British cavalry cut in amongst their broken ranks and made dreadful carnage. The battle of Assaye is memorable as the first of that brilliant series of victories which has distinguished the military career of the Duke of Wellington. On the 24th of November General Wellesley concluded an armistice with Sindia, by which the British troops were not to advance beyond Dohud, and those in the service of Sindia were not to approach Dohud, from the eastward, nearer than 50 m. The main army of the Berar rajah was encamped at Argaum, near Gawilghur. On the 29th of November, General Wellesley, joined by Colonel Stevenson, came in sight of the enemy, and after an obstinate conflict totally defeated them. Gawilghur, the rajah's principal fortress, was then reduced, and the rajah compelled to submit to a treaty of peace on very unfavourable terms.

While these events were passing on the western shores of India, the Bengal army, under Lord Lake, was advancing, on that side, against the enemy. On the 29th of August, 1803, he came up with the forces under the command of M. Perron, strongly posted, and defeated them. Perron finding that the cause in which he had embarked was not likely to succeed, abandoned the service of Sindia; and, on the 7th September, obtained leave to pass with his family, property, and attendants, unmolested to Lucknow. M. Louis Bourguieu succeeded him in the command of the army. The skill and perseverance of the British commanders, however, overcame all difficulties; and the forces under Holkar were in the end so reduced and dispirited by repeated defeats that scarcely a sufficient number could be found to form a guard to his person. Peace had already been concluded with Sindia and other chiefs, and it was evident that Holkar would soon be compelled to follow their example. Previous to this desirable event, however, several severe conflicts took place betwixt the British forces and the confederate troops, in all of which the enemy was eventually worsted. The principal of these was the siege of Bhurtpore, which was assaulted three different times by Lord Lake without success, and before which he lost above 3,000 men. On the 6th January, 1806, a treaty of peace was concluded with Holkar, by which he surrendered a great part of his territories; and at the same time, engaged, "never to entertain in his service Europeans of any description, whether British subjects or others, without the consent of the British government." The greater part of the territory wrested from Holkar was afterwards restored to him.

*Nepal war.*] From this period, no event of much importance occurred till 1814, when the Company's government became involved in hostilities with the Nepalese. Nepal, a mountainous and intricate country, stretched along the borders of the British territories for six or seven hundred miles, and had gradually pushed its encroachments to the Sutlej on the W, and absorbed many of the petty rajahships in the N. At no distant period, this extensive tract of mountainous country appears to have been divided among several independent sovereigns, of whom the most considerable were the rajahs of Nepal Proper and of Catmandu. In 1768, the former of these princes entertaining apprehensions from the ambitious designs of the latter, entered into an alliance with the neighbouring rajah of Gorkah, whom, upon the invasion of his territory by the rajah of Catmandu, he called to his assistance. The Gorkah chief readily complied with his invitation, and succeeded in expelling the rajah of Catmandu, but retained possession of the country for himself, and established the Gorkah or Gurkha dynasty upon the throne of Nepal. It is thus that in speaking of these people, they are commonly called Gurkhas, from the origin of the reigning family, while the country in general is denominated Nepal. From the year 1768, the Gurkha government, by a series of vigorous operations, had been gradually increasing in strength and extending its dominions. It had successively reduced all the independent chieftains of the hills, and, by incorporation of territory, had consolidated a vast empire, and become a very formidable power. At the bottom of the Nepal hills, and along the whole of their extent on the side of H., there is a narrow slip of land, not more on an average than 20 m. in breadth, which has been considered to belong to the Nepalese. It is denominated the Tariya, and forms a sort of margin along the whole line of the British provinces of Bengal, Bahar, Oude, and Delhi. This narrow slip of land gave rise, as might naturally be expected, to continual disputes concerning the line of boundary. The Gurkhas, ever desirous to extend their possessions upon the plains, had been pursuing, for many years, a system of petty encroachment upon the British provinces: at first by steps so gradual as hardly to be noticed, but latterly by larger strides and more palpable aggression. In this posture of affairs the Governor-general, Lord Hastings, after a strong remonstrance, to which no attention was paid, formally declared



war against the kingdom of Nepal; and in a decisive campaign compelled the rajah to submission. A treaty was framed, the terms of which, while they left the rajah an independent sovereign, effectually secured the British against any future danger from that quarter. The whole of the Tariya was ceded to the British government, with the exception of the district of Morung, which was left to the Gurkhas, on account of their urgent want of some lowland pasture for their cattle. The province of Kemaon was given up, and united in perpetuity to the Company's dominions; and the country upon the Jumna, to the W of Kemaon, was restored to the several chiefs from whom it had been conquered by the Gurkhas.

*Pindarry war.*] The next important political measure which engaged the attention of Lord Hastings was the extermination of a roving band of marauders, who, under the denomination of Pindarries had frequented Central India and the adjoining British provs. They consisted of 30,000 cavalry, subject to no regular discipline, and having in fact no national existence. Chettu, the principal Pindarry chieftain, had fixed his cantonments amid the rugged hills and wild forests which lie between the N bank of the Nerbudda and the Vindhya range. From these fastnesses he was soon driven; and in 1817, when the British armies entered Central India, he was closely pursued to Aggur and Mewar. Surrounded and driven as if into a net by the converging forces of the British presidencies,—repelled from the frontiers of Sindia and Holkar by the events of the Mahratta war,—and cut off from their accustomed retreat across the Nerbudda into the territories of the peshwa,—one of the main bodies of the Pindarries at length fell in with a British corps near Gungraur, and were so completely routed, that they instantly came under submission to the British government.

*Mahratta war.*] In November 1817, Sindia, one of the most powerful chiefs of the Mahratta confederacy, engaged to unite his efforts with those of the British government in suppressing the predatory system, and restoring the general tranquillity of the country. Meanwhile, however, under the mask of solemn treaties, reiterated assurances of friendship, and apparent co-operation in the scheme which then engaged the governor-general's attention, the Mahratta powers had concerted a deep-laid conspiracy for overthrowing the British dominion in India. The plot was first revealed at Puna, on the 5th November 1817,—the very day on which the treaty with Sindia was signed. The peshwa commenced hostilities against the subsidiary force stationed in his capital. The movements of Holkar's army, and the character and circumstances of the court of Indore, left little doubt that this branch also of the Mahratta power would speedily participate in the general plot. Amir-Khan was waiting artfully until he could calculate the result of the approaching conflict; the neutrality of Sindia was insecure, and exposed to a thousand risks from the continual solicitations and taunts with which he was alternately assailed; in fact, the only one of the Mahratta allies who strictly preserved his fidelity to the British government was the Guicowar. A war was now commenced upon a scale before which the dimensions of a European campaign shrink in comparison. Every native power was upon the watch to profit by any mischance or misfortune of the British army, which had moreover to protect a frontier of not less than 2,500 m. in extent. The army was visited at this momentous juncture by an epidemic disorder denominated *cholera morbus*, but resembling that malady only in some of its principal features. It had been first observed about the middle of the rainy season of 1817, at Jessore, in the Delta of the Ganges, along whose banks, and those of its tributary streams, it spread its fatal course, comprehending the city of Calcutta in its ravages. For about ten days the camp was converted into an hospital,—the deaths amounting to a tenth of the number collected. As the army advanced in hopes of reaching a purer air, each day's route was strewed with the dead and dying. The malady had happily expended its virulence, when the movement of the Pindarries towards Gwalior, at the end of the month, demanded active exertions in the field. The military results of the whole Mahratta campaign may be summed up in a few words. Between Nov. 1817, and June 1818, 28 actions were fought in the field, and 120 forts, many of which had been deemed impregnable, fell by surrender, siege, or storm. The distance between the most northern and the most southern of these forts was not less than 700 m. The forces on each side cannot well be compared, for want of accurate knowledge of the numbers belonging to the hostile powers, but Colonel Blacker estimated the aggregate amount of the hostile armies at 217,000. The British force in the field, including the auxiliary and irregular troops, amounted to 116,000, of which only 13,000 were Europeans. The war thus successfully terminated placed in the hands of the British the sovereignty and the destinies of India.

*Afghanistan war.*] The war with the Birman empire,—by which a large extent of country along the bay of Bengal was gained,—is noticed in another place.—Afghanistan,—an independent kingdom situate between our Indian possessions and Persia,—next afforded the British arms serious employment. The government of India, with the view of frustrating the hostile designs of Russia, and of securing as far as practicable the integrity of the Afghanistan territory as a barrier against Russian aggression, became parties to a treaty between Shah-Shuja and Runjit-Singh of Lahore, which had for its chief object the re-establishment of the turban on the throne of his ancestors. The British troops accordingly entered Afghanistan to carry the objects of that treaty into effect. On the 2d of June 1839, the last division of the troops

marched from Candahar, and on the 20th the whole force was before Ghuzni, the most formidable fortification in Asia, which they took by storm on the 21st. Advancing to Cabul, the British army placed Shah-Shuja on the throne; but a series of disastrous events followed, which are related in the historical paragraph of the article *AFGHANISTAN*.

*War in the Punjab.*] The country lying between the Indus and the Sutledge, from 29° 15' to 34° N lat., and 70° 40' to 76° E long., and watered by these two great rivers, and the Jelum, the Chenab, and the Ravi, constitutes a rich and important territory, of which the pop. has been estimated at 1,500,000, about one-half Hindus, 500,000 Mahomedans, and 250,000 Sikhs. There had long been no government in this territory strong enough to control its own Sikh soldiery. The Sikhs, though constituting so small a proportion of the pop., were in fact the governing class in the Punjab. The religion of the Sikhs, and the nation itself as distinguished from the natives of India generally, originated, towards the close of the 17th cent., with Baba Nanak, who had been once a trader, but who subsequently led a life of religious meditation. He was one of those individuals of the unlearned classes who have arisen from time to time chiefly among the agricultural population of Upper India, and who, dissatisfied with the distinction of caste, and its concomitant national disunion, have endeavoured to produce a fusion of the existing systems of faith, in which might be included the various Hindu votaries, and even the Mahomedans of India. Nanak was enabled to disseminate his system by the protection of the native ruler who held the government of the Punjab under the Mahomedan sovereign of Delhi. He is said to have been a great traveller; and he certainly induced numbers of his countrymen to adopt his faith, and to call themselves *Sikhs* or 'disciples.' The sect continued to exist, with precarious fortune, after his death, under a succession of teachers, some of whom suffered persecution under the Mahomedan sovereigns, and one of them, Tegh Bahadur, the ninth in order from Nanak, was put to death in 1765. The Sikhs had almost disappeared, when Govind Singh, the son and successor of Tegh Bahadur, converted them from a religion of quietism and toleration to a republican confederacy of soldiers, who declared implacable enmity to all the followers of Mahomed. He abrogated the distinction of caste, admitted all Hindus into the new republic, and adopted for his military adherents the surname of *Singh*, or 'Lion.' He also began the political organization of the Sikhs, by the institution of a federal council of chiefs, who met periodically to consult on all measures connected with the body. The mode of government adopted at that time continued with several modifications until the close of the last century. The country was divided into 12 misals, within each of which the chief exercised independent power,—though joining with the federal body for objects common to all, and all agreed in determined resistance to the Mahomedan yoke. The Sikhs prospered under this mode of government, which lasted until the time of the late Runjit Singh, who gradually destroyed the several chiefs, under any, or even no pretext, and thus possessed himself of all the powers of government. The only misals which did not come under his yoke were those between the Sutledge and the Jumna, which spontaneously dissolved themselves under the protection of the British government. The last general diet was held in 1804, when Lord Lake pursued Holkar into the Punjab. Runjit Singh reduced the whole of the Punjab under his own absolute power, gained a considerable portion of Afghanistan, occupied and ruined Cashmere, compelled the chiefs of Little Tibet to pay him tribute, and even came into collision with the forces of China. All this power was the growth of little more than 30 years, and was obtained wholly by the sword, unchecked by the necessity of any plea or pretext, and kept together solely by the means which formed it, to be dissolved into more than pristine insignificance as soon as the person who gave it birth should be no more. The British government was the only power with which Runjit maintained friendly intercourse, and the only one from which his ambition could receive a check; and to that government it would seem that the task is now delegated of keeping alive the monarchy founded by the successful chief, after having destroyed the military body with which he obtained his power, and which, unrestrained by his iron will, had become as destructive to the nation which maintained it as dangerous to its neighbours. The political confederacy of the Sikhs was destroyed by the power of Runjit Singh; and the religion of Nanak has also ceased to exist in its original character. On the fall of Napoleon, numerous French and Italian officers found their way into the Punjab, and were taken into the service of the maharajah. By these means Runjit Singh organized and disciplined an army of Sikhs wholly disproportioned to the actual wants of the government; and his successors soon discovered that this army was in fact the master of the country, and regarded itself as the state. Every attempt to reduce its numbers was set at defiance; not a single regiment would suffer extinction; while the revenues of the country were wholly exhausted in the vain attempt to satisfy their rapacity. At last, in an evil hour for themselves, these formidable soldiers, encouraged doubtless by the disasters which the British had sustained in Afghanistan, resolved to measure their strength with that of the rulers of India. On the 11th of December 1845, the Sikh army in great strength, and with a vast and formidable field of artillery, crossed the Sutledge, and proceeded to intrench themselves at Ferozeshah, on the l. bank of that river. Sir Henry Hardinge, the governor-general on this intelligence, hastened towards the invaded frontier, and on the 18th of December an action took place near Mudki, in which a Sikh army of 40,000 men, with 40 guns, was

defeated by a force not exceeding a third of that number with a few small guns. Three days after this engagement, the intrenched camp of the Sikhs at Ferozeshah was attacked and carried at the point of the bayonet after an obstinate combat. The Sikhs, however, kept together in sufficient force to threaten Ferozepore and Ludiana, but were again defeated at Aliwal, and on the 16th of February, the whole concentrated Sikh forces were driven across the Sutledge, with prodigious loss of men and that of their whole park of artillery. Following up these advantages, the British army marched upon Lahore, and finally annexed the Punjab, with the exception of Cashmere, and some small territories assigned to Gholab-Singh.

It affords us pleasure to close this brief historical sketch of the Company's proceedings in India with the following testimony of one well-qualified to judge of the manner in which the duties and obligations of that great body of 'merchant princes' have been generally discharged in their government of India: "To communicate," says Mr. Mill, in his *History of British India*, "the whole of the impression made upon a mind which has taken a survey of the government of India by the East India company, more completely, through the old field of its action, than was ever taken before, and which has not spared to bring forward into the same light the unfavourable and the favourable points, it may be necessary to state,—and this I conceive to be the most convenient occasion for stating,—That, in regard to *intention*, I know no government, either in past or present times, that can be placed equally high with that of the East India company: That I can hardly point out an occasion on which the schemes they have adopted, and even the particular measures they pursued, were not by themselves considered as conducive to the welfare of the people whom they governed: That I know no government which has on all occasions shown so much of a disposition to make sacrifices of its own interests to the interests of the people whom it governed, and which has, in fact, made so many and such important sacrifices: That, if the East India company have been so little successful in ameliorating the practical operation of their government, it has been owing chiefly to the disadvantage of their situation,—distant a voyage of several months from the scene of action,—and to that imperfect knowledge which was common to them with almost all their countrymen: but that they have never erred so much as when, distrustful of their own knowledge, they have followed the directions of men whom they unhappily thought wiser than themselves, viz., practical statesmen and lawyers: and that, lastly, in the highly important point of the servants or subordinate agents of government, there is nothing in the world to be compared with the East India company, whose servants, as a body, have not only exhibited a portion of talent which forms a contrast with that of the ill-chosen instruments of other governments, but have, except in some remarkable instances, as that of the loan transactions with the nabob of Arcot, maintained a virtue which, under the temptations of their situation, is worthy of the highest applause. In matters of detail I have more frequently had occasion to blame the Company's government than to praise it; and, till the business of government is much better understood, whoever writes history with a view solely to the good of mankind will have the same thankless task to pursue; yet I believe it will be found that the company during the period of their sovereignty have done more in behalf of their subjects,—have shown more of good-will towards them,—have shown less of a selfish attachment to mischievous powers lodged in their own hands,—have displayed a more generous welcome to schemes of improvement,—and are now more willing to adopt improvements,—not only than any other sovereign existing in the same period, but than all other sovereigns taken together on the surface of the globe."

**HINDRINGHAM**, a parish in Norfolk,  $3\frac{1}{2}$  m. SE of Walsingham, on a branch of the Skiffkey. Area 3,313 acres. Pop. 749.

**HINDS**, a central county of the state of Massachusetts, U. S., comprising an area of 875 sq. m., drained by an affluent of Pearl river on the E, and on the W by several tributaries of Big Black river. Its surface is level, and its soil generally fertile. Pop. in 1840, 19,098. Jackson, the capital of the state, is situated in this co., on Pearl river. Its chief town is Raymond.

**HINDU-KUSH**, **HINDU-KOH**, or **INDIAN CAUCASUS**, a mountain-range on the N frontiers of Afghanistan, which Humboldt regards as forming a connecting link between the mountain-ranges of N. Turkistan, and the Hazareh range to the E of them, and the great Kuen-lun range of Central Asia, rather than as the western prolongation of the Himalaya, which latter range is separated from the Kuen-lun by the valley of the Upper Indus. Humboldt represents the H. as striking off from the Bolar range in about N lat.  $36^{\circ}$ , E long.  $74^{\circ}$ , and running 300 m., in a direction to the S of W, to its culminating summits, in N lat.  $35^{\circ} 40'$ , E long.  $68^{\circ} 50'$ , about 45 m.

NNW of Cabul. The ridge immediately to the E and W of this point appears to be about 20,000 ft. above sea-level; but we have no exact measurements. Wood, who explored the Khawak pass, in N lat.  $35^{\circ} 38'$ , E long.  $70^{\circ}$ , estimated its alt. at 13,200 ft.; and it lies 50 m. to the E of the great collection of lofty peaks forming the H. Proper. Between the Khawak pass and Bamian, a distance of about 150 m., occur numerous passes leading from Cabul into Budakshan. To the W of Bamian, the range becomes greatly depressed, but may be regarded as prolonged in the Ghur mountains, or *Paropamisus*, to the great Persian table-land. Burnes crossed the H. by 6 successive passes, from Cabul to the valley of the Oxus at Khulum, 40 m. E of Balkh. The journey, estimated by him at 260 m., employed 13 days. Starting from an elevation of 6,600 ft. above sea-level, he followed the river of Cabul to its source, at an elevation of 8,600 ft.; and attained the greatest points of elevation in the passes of Hajiguk [12,400 ft.] and Kalu [13,000 ft.], both of which were covered with snow. None of the other passes exceeds 9,000 ft. in alt. From the last of them, called Kara-Kotul, he descended the bed of a river, falling 60 ft. a-mile, till he reached the plains of Turkistan, 2,000 ft. above sea-level. Granite appears to form the core of this mountain-range; near the surface appear secondary limestone and fossiliferous sandstone. Its vegetation is scanty, presenting only a few dwarf firs, poplars, and birches; and in the more sheltered passes, apricot trees, blackberry bushes, sweet-briar, and hawthorn. The *kiang*, an animal resembling a quagga, the *yak* or grunting-ox, and the *kutchkar* or wild sheep, roam over its untrodden wilds, and find plentiful fodder in the furze, aromatic plants, and *prangos*, a species of umbellifera, the leaves, flowers, stems, and seeds of which are alike nutritious. See **AFGHANISTAN**.

**HINESBURG**, a township of Chittenden co., in the state of Vermont, 42 m. W of Montpelier. It has an irregular surface, and is watered by Platte river and Lewis creek. Pop. in 1840, 1,682.

**HINESVILLE**, a village of Liberty co., in the state of Georgia, 196 m. SE of Milledgeville, on the pine lands, 14 m. NE of Riceboro'. In 1840 it consisted of only 3 or 4 dwellings.

**HING**, a district and town of China, in the prov. of Shan-se, division and 100 m. NW of Tae-yuen-fu, on an affluent of the Hoang-ho, in N lat.  $38^{\circ} 38'$ .

**HING-E-FU**, a division and town of China, in the prov. of Kwei-chu. The div. comprises 4 districts, one of which bears the same name.

**HING-GAN**, a district and town of China, in the prov. of Kwan-se, division and 35 m. NE of Kwei-in-fu, on the Siang-kiang, and about 12 m. from the frontier of the prov., in N lat.  $25^{\circ} 32'$ .

**HINGENE**, a department and commune of Belgium, in the prov. of Antwerp, arrond. of Malines, watered by the Schelde and Rupel. Pop. of dep. 3,607; of com. 1,216.

**HINGEON**, a department and commune of Belgium, in the prov. and arrond. of Namur. Pop. of dep. 577; of com. 568.

**HINGES**, a commune of France, in the dep. of the Pas-de-Calais, cant. and 3 m. N of Bethune. Pop. 1,055.

**HINGHAM**, a parish and market-town in Norfolk, 6 m. NW of Wymondham. Area 3,649 acres. Pop. in 1831, 784; in 1851, 1,648.

**HINGHAM**, a township of Plymouth co., in the state of Massachusetts, 15 m. SE of Boston, on the S side of Boston bay. Its surface is irregular, but its soil in many parts possesses considerable fertility. It has packet-communication with Boston and con-

ducts an active fishing and coasting trade. Pop. in 1840, 3,564.

**HING-HWA**, a division and town of China, in the prov. of Fo-keên. The div. comprises 2 districts. The town, which is situated on a bay of the channel of Fo-keên, in N lat.  $25^{\circ} 25' 22''$ , and E long.  $119^{\circ} 8'$ , has a small port. It occupies a highly advantageous position, and is superior as a town to Tseuen-chu-fu, but possesses comparatively little trade. The surrounding country is highly romantic, but its resources are not very abundant.

**HING-KING-LE-TSZE-TING**, a district and town of China, in the prov. of Leaou-tung, division and 81 m. E of Fung-teen-fu.

**HING-KU-CHU**, a district and town of China, in the prov. of Hu-pih, division and 88 m. SE of Wu-chang-fu, on an affluent of the Yang-tse-kiang, in N lat.  $26^{\circ} 22'$ .

**HINGLAISGHUR**, a fortress of Hindostan, in the prov. of Malwah, and district of Mundissor, 100 m. N of Ougein, and 45 m. SSW of Kota. It stands on a height, surrounded by walls and a deep natural ravine, 200 ft. in breadth, and crossed by 3 artificial causeways. It belongs to the Holcar family; and is considered one of the strongest citadels in their dominions.

**HINGLAJ**, a celebrated place of Hindu pilgrimage, in Beluchistan, on the l. bank of the Aghor, about 20 m. above the entrance of that river into the Indian ocean, and 60 m. SW of Beila. The pagoda is a low mud edifice dedicated to Kalee.

**HING-MI**, a district and town of China, in the prov. of Kwan-se, division and 20 m. WNW of Yuh-lin-chu, near one of the sources of a river which flows into the gulf of Tonquin at Lien-tchou.

**HING-NING**, a district and town of China, in the prov. of Hu-nan, division of Lin-chu, on a small stream, 90 m. SE of Hang-chu-fu, in N lat.  $25^{\circ} 54' 40''$ , and E long.  $113^{\circ}$ .—Also a district and town in the prov. of Kwang-tung, division of Kea-ying-chu, 70 m. NW of Chaon-chu-fu, in N lat.  $24^{\circ} 3' 36''$ , and E long.  $115^{\circ} 42'$ .

**HING-PING**, a district and town of China, in the prov. of Shen-se, division of Si-gan-fu, in N lat.  $38^{\circ} 18'$ .

**HING-TANG**, a district and town of China, in the prov. of Chih-le, division of Ching-ting-fu.

**HINGUNGHAUT**, a considerable commercial town of Hindostan, in the prov. and 50 m. SSW of Nagpur, on an affluent of the Wurda.

**HING-WAN**, a district and town of China, in the prov. of Sze-chuen, division of Sen-chu-fu, in N lat.  $28^{\circ} 10'$ , and E long.  $105^{\circ}$ .

**HING-WHA**, a district and town of China, in the prov. of Keang-su, division of Yang-chu-fu, in N lat.  $32^{\circ} 56'$ .

**HING-YAN-FU**, or **SIN**, a division and town of China, in the prov. of Shen-se. The div. comprises 7 districts. The town is on the r. bank of the Han-kiang, 120 m. SSE of Se-gan-fu, in N lat.  $33^{\circ} 31' 20''$ .

**HING-YIH-HEEN**, a district and town of China, in the prov. of Chih-le, div. of Shua-tih-fu.

**HINHANGABAHU'**, a river of Brazil, in the prov. of São Paulo, which waters the city of that name, and, after uniting with the Tamandatahi, falls into the Tieté.

**HINIESTA**, **JINIESTA**, or **YNIESTA**, a town of Spain, in New Castile, in the prov. and 50 m. SSE of Cuenca, partido of Villanueva-de-la-Jara. Pop. 4,116. It lies on the sides of two small hills which rise amid fertile plains, and is large and well-built. It has a handsome church, and possesses extensive manufactories of common woollen fabrics. A fair is held here once a year. This town occupies the site of the ancient *Segestica* of the Romans, numerous

remains of which still exist. In the environs are quarries of black and red jasper.

**HINKLETOWN**, a village of Lancaster co., in the state of Pennsylvania, U. S., 42 m. SE of Harrisburg, on the N side of Conestoga creek.

**HINKSEY (NORTH)**, or **LAURENCE**, a parish in Berks, about  $\frac{1}{4}$  m. W of Oxford, and  $5\frac{1}{2}$  m. NNW of Abingdon, on the W bank of the Isis. Area 900 acres. Pop. in 1831, 187; in 1851, 488.

**HINKSEY (SOUTH)**, a parish in Berks, about  $\frac{3}{4}$  m. S of Oxford, and  $4\frac{1}{2}$  m. N of Abingdon. Area 550 acres. Pop. in 1831, 153; in 1851, 300.

**HINOJALES**, a town of Spain, in Andalusia, in the prov. and 55 m. NNE of Huelva, partido and 6 m. NE of Aracena. Pop. 336.

**HINOJAR-DEL-REY**, a village of Spain, in Old Castile, in the prov. and 12 m. SE of Burgos, and partido of Salas-di-los-Infantes, near the l. bank of the Arandilla, and near the supposed site of the ancient *Chunia*. Pop. 130.

**HINOJARES**, a town of Spain, in Andalusia, in the prov. and 38 m. ESE of Jaen, and partido of Cazorla, in a plain, watered by the Turilla. Pop. 588. It has salt-works, a glass-house, and several manufactories of brooms.

**HINOJOS**, a town of Spain, in Andalusia, in the prov. and 32 m. E of Huelva, and partido of La Palma. Pop. 774.

**HINOJOSA**, a town of Spain, in Leon, in the prov. and 55 m. W of Salamanca, partido of Lumbrales, between three eminences near the l. bank of the Duero. Pop. 2,028. The streets are steep, and the houses generally low and damp. It possesses manufactories of hats and linen, a fulling-mill, and a tile-work. In the environs are several tumuli bearing Latin inscriptions. The surrounding district, which is watered by the Camaces, Huebra, and Agueda, is fertile but very unhealthy.—Also a town in New Castile, in the prov. and 45 m. WNW of Toledo, and partido of Talavera-de-la-Reina, at the foot of Mount St. Vincent, on the summit of which are the remains of a fortress of the Templars. Pop. 1,400. It has a convent and a hermitage. The environs produce good wine.—Also a town in Old Castile, in the prov. of Soria and partido of El-Burgo-de-Osma.

**HINOJOSA-DEL-CAMPO**, a town of Spain, in Old Castile, in the prov. of Soria and partido of Agreda.

**HINOJOSA-DEL-DUQUE**, a judicial partido and town of Spain, in Andalusia, and prov. of Cordoba. The partido comprises 6 pueblos. The town is 42 m. NNW of Cordoba, in an extensive plain the extremities of which are bathed by the Zújar and Guamatilla. Pop. 7,748. It has 2 convents and 2 hospitals; and possesses several manufactories of linen and of woollen fabrics.

**HINOJOSA-DE-LA-SIERRA**, a town of Spain, in Old Castile, in the prov. and partido, and 9 m. NNW of Soria, near the l. bank of the Duero.

**HINOJOSA-DEL-VALLE**, a town of Spain, in Estremadura, in the prov. and 16 m. NE of Llerena, and partido of Almendralejo, in a fertile plain. Pop. 578.

**HINOJOSOS**, a town of Spain, in New Castile, in the prov. and 50 m. SW of Cuenca, partido of Belmonte. It consists of two contiguous pueblos, distinguished as Hinojosos-del-Marquesado and Hinojosos-del-Orden, containing respectively 1,347 and 1,758 inhabitants.

**HINOTOAN**, a town of the island of Mindanao, on a bay of the E coast, to the N of Cotel.

**HINSDALE**, a township of Cheshire co., in the state of New Hampshire, U. S., 71 m. WSW of Concord, bounded on the W by Connecticut river



and watered by Ashuelot river and several of the tributaries of the Connecticut. It is intersected from E to W by a mountain-range 800 or 900 ft. in height, but is to a great extent fertile and well-cultivated. Pop. in 1840, 1,141.—Also a township of Berkshire co., in the state of Massachusetts, 121 m. W of Boston. It is hilly, but affords fine pasturage. Pop. 995.—Also a township of Cattaraugus co., in the state of New York, 287 m. WSW of Albany, on the Genesee Valley canal, and on the New York and Erie railroad. Pop. 1,937.

**HINSTOCK**, a parish in Salop, 6 m. NNE of Newport, on the Birmingham and Liverpool Junction canal. Area 3,036 acres. Pop. in 1851, 862.

**HINTLESHAM**, a parish in Suffolk,  $4\frac{1}{2}$  m. NE of Hadleigh. Area 2,828 acres. Pop. in 1851, 583.

**HINTON**, a township in the p. of Pontesbury, Salop. Pop. 59.—Also a tything in the p. of Berkeley, Gloucestershire. Pop. 579.—Also a hamlet in the p. of Woodford, Northamptonshire. Pop. 299.—Also a hamlet in the p. of Blythburgh, Suffolk. Pop. 136.

**HINTON (GREAT)**, a tything in the p. of Ashton-Steeple, Wilts, 4 m. ENE of Towbridge. Pop. in 1831, 234; in 1851, 177.

**HINTON (LITTLE)**, a parish in Wilts, 5 m. E of Swindon. Area 1,815 acres. Pop. in 1851, 354.

**HINTON-ADMIRAL**, a chapelry in the p. of Christchurch, Hants. Pop. 334.

**HINTON-AMPNER**, a parish in Southampton, 3 m. SSW of New Alresford. Area 2,349 acres. Pop. in 1831, 389; in 1851, 384.

**HINTON-BLEWETT**, a parish in Somerset,  $7\frac{1}{2}$  m. NNE of Wells. Area 1,102 acres. Pop. in 1831, 325; in 1851, 322.

**HINTON-CHERRY**. See **CHERRY-HINTON**.

**HINTON-ST.-GEORGE**, a parish in Somerset, 2 m. NNW of Crewkerne. Area 1,500 acres. Pop. in 1831, 850; in 1851, 728.

**HINTON-ON-THE-GREEN**, a parish in Gloucestershire,  $7\frac{1}{2}$  m. ENE of Tewkesbury, on the Isborn. Area 2,259 acres. Pop. in 1831, 310; in 1851, 192.

**HINTON-IN-THE-HEDGES**, a parish in Southampton, 2 m. NW of Brackley. Area 2,070 acres. Pop. in 1831, 173; in 1851, 157.

**HINTON-MARTEL**, or **MAGNA**, a parish in Dorset, 4 m. NNE of Wimborne-Minster. Area 1,534 acres. Pop. in 1831, 267; in 1851, 324.

**HINTON-PARVA**, or **STANBRIDGE**, a parish in Dorset,  $2\frac{1}{2}$  m. N of Wimborne-Minster, on the Allon. Area 439 acres. Pop. in 1831, 36; in 1851, 55.

**HINTON-ST.-MARY**, a parish in Dorset,  $6\frac{1}{2}$  m. SW of Shaftesbury. Area 982 acres. Pop. in 1831, 303; in 1851, 345.

**HINTON-ST.-WALLERY**, or **WALDRIST**, a parish in Berks, 6 m. ENE of Great Farringdon. Area 2,180 acres. Pop. in 1831, 348; in 1851, 389.

**HINTON-TARRANT**, a parish in Dorset, 8 m. SW of Cranborne, crossed by the post-road from Dorchester to Salisbury. Area 2,279 acres. Pop. in 1831, 241; in 1851, 319.

**HINTS**, a parish and village in Staffordshire,  $3\frac{1}{2}$  m. SW of Tamworth, on a branch of the Tame. Area 1,849 acres. Pop. in 1831, 225; in 1851, 218.

**HINWICK**, a hamlet in the p. of Puddington, Bedfordshire. Pop. 204.

**HINWYL**, a bezirk or bailiwick, parish, and village of Switzerland, in the cant. and 15 m. ESE of Zurich, bail, and 5 m. NE of Gröningen. Pop. (Protestant) 2,729. In the vicinity are the alkaline springs and baths of Gyrenbad and Ehrlösen.

**HINXHILL**, a parish in Kent,  $2\frac{1}{2}$  m. E of Ashford, on the South-Eastern railway. Area 663 acres. Pop. in 1831, 163; in 1851, 135.

**HINXTON**, a parish in Cambridgeshire,  $4\frac{1}{2}$  m. WSW of Linton, on the banks of the Cam, and on the railway from London to Cambridge. Area 1,503 acres. Pop. in 1831, 333; in 1851, 465.

**HINXWORTH**, a parish in Hertfordshire, 4 m. N of Baldock. Area 1,440 acres. Pop. in 1851, 347.

**HINZEMONT**, a commune of Belgium, in the prov. of Namur, dep. of Hastiere-Lavaux. Pop. 101.

**HINZUAN**. See **ANZUAN**.

**HIO (SAN-ANDRES-DEL)**, a town of Spain, in Galicia, in the prov. and partido of Pontevedra, on the shore of the Atlantic. Pop. 2,590. It has a parish-church and a custom-house. Fishing and the rearing of cattle form extensive branches of local industry.

**HIORRING**—formerly **WENDSYSSEL**—an amt or bailiwick and town of Denmark, in Jutland. The bail. occupies the N extremity of Jutland, and terminates on the NNE in a long peninsula, the end of which forms the Skaw, or Cape Skagen. It is bounded on the E by the Cattegat; on the S by the bail. of Aalborg, from which it is partly separated by the Linn-Fiord; on the SW by the bail. of Tisted; and on the W and NW by the Skager Rack; and comprises a total area of 1,080 sq. m. It is divided into the hærads of Horns, Wennebjerg, Dronninglund, Børglum, Hvettho, and Osterhan with Lasøe; and comprises 4 towns, viz. Skagen, Frederikshavn, H., and Saby, and 85 villages. Pop. 67,800.—The town is 30 m. N of Aalborg, and about equidistant to the SW of Cape Skagen, in N lat.  $57^{\circ} 27' 41''$ , and  $2^{\circ} 35' 43''$  W long. of Copenhagen. Pop. 1,800. It has a church, and possesses several breweries and distilleries of brandy. In 1693, it was nearly totally destroyed by fire.

**HIORTØE**, a small island of Denmark, in the Little Belt, to the S of the island of Fyen, and E of that of Dreyoe. Agriculture and fishing form the chief employments of the inhabitants.

**HIPANEMA**, a river of Brazil, in the prov. of São Paulo, an affluent of the Rio-Sorocaba.

**HIPPA**, a small island in the N. Pacific, near the shore of British North America, to the W of Queen Charlotte's island, and to the NW of Rennel strait, in N lat.  $53^{\circ} 33'$ .

**HIPPENSCOMBE**, an extra-parochial district of Wilts, near Great Bedwin. Area 980 acres. Pop. in 1831, 58; in 1851, 50.

**HIPPERHOLME WITH BRIGHOUSE**, a township in the p. of Halifax, W. R. of Yorkshire, on the Manchester and Leeds railway, 26 m. from Leeds, and 34 m. from Manchester. Area 2,550 acres. Pop. in 1831, 4,977; in 1851, 6,991. The village is skirted on the S by the Calder.

**HIPPOLYTE (SAINT)**, a canton, commune, and town of France, in the dep. of the Doubs, arrond. of Montbéliard. The cant. comprises 26 com. Pop. in 1831, 7,233; in 1841, 7,726. The town is situated between lofty mountains, at the confluence of the Doubs and Dessoubre. Pop. 862. It has extensive manufactories of clocks and of jewellery, a dye-work, several tanneries, and a hat-manufactory. The environs are noted for their cheese. The origin of this town is unknown. In 1303, a chapter composed of 8 prebends, was founded here by Jean II., and an Ursuline convent was established in 1617.—Also a canton, commune, and town, in the dep. of the Gard, arrond. of Le Vigan. The cant. comprises 6 com. Pop. in 1831, 7,922; in 1841, 8,059. The town is 14 m. E of Le Vigan, and 29 m. WNW of Nîmes, near the sources of the Vidourle. The town, which has some fortifications, and an old castle, is well built, and has 4 suburbs. Pop. in 1841, 5,297. A canal, by which it is intersected, supplies its fountains with water. It has a Calvinistic consistorial

church, and possesses considerable manufactories of silk and cotton-hosiery, leather, and cloth. Cattle-fairs are held 4 times a-year. In 1687 this town was enclosed by a wall.—Also a village in the dep. of the Puy-de-Dôme, cant. and 3 m. WNW of Riom. Pop. 1,398.—Also a town in the dep. of the Haut-Rhin, cant. and 4 m. NE of Ribeauviller, on a mountain of the same name. Pop. 2,258. It is defended by a fortress, and has a parish-church, in which are the relics of the saint from whom the town takes its name. St. H. was taken in 1444 by the dauphin, son of Charles VII., and was afterwards taken and ravaged by the Germans. It was ceded to France by the treaty of Westphalia, and by that of Paris in 1718, to the duke of Lorraine. In the vicinity is a coal-mine.

**HIPPOLYTE (SAINT)**, or **LA-CHAPELLE-SAINT-HIPPOLYTE**, a commune of France, in the dep. of the Indre-et-Loire, cant. and 8 m. SE of Loches, on the r. bank of the Indre. Pop. 1,058. A fair for cattle, grain, hemp, wax, and other commodities, is held here once a-year.

**HIPPOLYTE-DE-CANTELON (SAINT)**, a village of France, in the dep. of Calvados, cant. and 8 m. E of Lisieux, and 36 m. ESE of Caen. Pop. 200. A fair for cattle and mercery is held here once a-year.

**HIPSWELL AND ST. MARTINS**, a chapelry, in the p. of Catterick, N. R. of Yorkshire,  $1\frac{1}{2}$  m. SE of Richmond. Area 2,795 acres. Pop. in 1851, 293.

**HIR**, a hamlet in the p. of Llanarth, Cardiganshire. Pop. 270.

**HIR-ABAD**, a town of Persia, in the prov. of Khorassan, 60 m. NNW of Yazd.

**HIRAM**, a township of Oxford co., in the state of Maine, U. S., 79 m. WSW of Augusta, on Saco river. It possesses a good and fertile soil. Pop. in 1840, 1,233.—Also a township of Portage co., in the state of Ohio, 154 m. NE of Columbus. It possesses a fertile and well-cultivated soil. Pop. 1,080.

**HIRAPUR**, a town of Hindostan, in the prov. of Allahabad, district of Bundeledund, 48 m. SSW of Chatterpur.

**HIRCHOVA**, or **HIRSOVA**, a town of Turkey in Europe, in Bulgaria, sanj. and 57 m. NE of Silistria, and 42 m. SW of Babadagh, near the r. bank of the Danube, on a steep rock at the foot of which are suburbs inhabited by Wallachians and Greeks. Pop. 4,000. It is fortified, and contains a castle and a mosque. It occupies the site of the ancient *Axiopolis*.

**HIREL**, a commune of France, in the dep. of the Ile-et-Vilaine, cant. of Cancale. Pop. 1,754.

**HIREFOLI**, a town of Turkey in Europe, in Rumelia, capital of a district in the sanj. and 66 m. NNE of Gallipoli, and 54 m. SE of Adrianople, on the l. bank of the Ainadjik.

**HIRLINGEN**, or **HIRRLINGEN**, a town of Würtemberg, in the circle of the Schwarzwald, obmt and 4 m. SSW of Rottenburg, and 17 m. SW of Reutlingen. Pop. (Cath.) in 1840, 1,544. It has a castle.

**HIRMAH**, a town of Abyssinia, in the Dawaro district, 54 m. SW of Hubetta, and 360 m. SE of Gondar.

**HIRMANLI**, or **HERMANLI**, a town of Turkey in Europe, in Rumelia, capital of a district in the sanj. and 15 m. W of Tchirmen, and 36 m. NW of Adrianople, at the confluence of the Uzunjdja with the Maritza.

**HIRNANT**, a parish in Montgomeryshire,  $6\frac{1}{2}$  m. NW of Llanfyllin. Pop. 308.

**HIRRAHALE**, a populous village and fort of Hindostan, in the prov. of Balaghaut, district and 12 m. SW of Ballary.

**HIRRIUR**, a town of Hindostan, in the prov. of Mysore, 108 m. N of Seringapatam, on the r. bank of the Vavadothi. It was fortified, and was formerly

of considerable importance, but suffered much from the incursions of the Mahrattas.

**HIRSAU**, or **HIRSCHA**, a village of Würtemberg, in the circle of the Schwarzwald, bail. and 2 m. N of Kalw, and 22 m. W of Stuttgart, on the Nagold, at an alt. of 1,077 ft. above sea-level. Pop. in 1840, 743. Hosiery, tinned iron plates, morocco leather, and paper, form the chief articles of local manufacture. It has also a fine wool-spinning mill. Here are the ruins of a Benedictine abbey, founded in 830.—Also a town of Bavaria, in the circle of the Upper Palatinate, presidial and 9 m. NE of Amberg, and 43 m. N of Ratisbon. Pop. 1,406. It contains a royal castle and a parish-church, and has extensive manufactories of stone-ware. Jerome of Prague was arrested here in 1415. In the environs are quarries of slate and talc.

**HIRSCHBERG**, a circle and town of Prussia, in the prov. of Silesia, regency and 30 m. SW of Liegnitz, on the l. bank of the Bober, at the confluence of the Zacken, and at an alt. of 1,200 ft. above sea-level. Pop. 7,327. It is surrounded by walls, and has 3 suburbs. It is regularly built, and contains a Lutheran and 4 Catholic churches,—the former with a fine organ and a library,—a gymnasium, an orphan's asylum, 2 hospitals, an alms-house, and a commercial school. It has extensive manufactories of cloth, linen, sail-cloth, hosiery, gloves, and porcelain; numerous bleacheries, dye-works, and printing and fulling-mills; several sugar-houses, a paper-mill, and 2 printing establishments. It is also the emporium for the greater part of the linen made in the prov. This town was reduced to ashes in 1549. In 1633 it was pillaged by the Saxons, and again the following year by the Imperialists. The circle of H. is noted as one of the most industrial parts of the kingdom.—Also a town in the prov. of Westphalia, regency, circle, and 11 m. E of Arensburg. Pop. 711. Linen is extensively manufactured here.—Also a town in the principality of Reuss-Lobenstein-Ebersdorf, 9 m. ESE of Lobenstein, on the r. bank of the Saale. Pop. 1,700. It has a castle, a church, and a town-house; and possesses extensive manufactories of calico, handkerchiefs, and leather.—Also a village in the kingdom of Saxony, circle of the Erzgebirge, to the NW of Schneeberg.—Also a mountain of Bavaria, in the circle of Upper Bavaria, near the Tegernsee, which rises to the height of 6,150 ft. above sea-level.

**HIRSCHBERG, DOKZY**, or **DOBZY**, a small town of Bohemia, in the circle of Bunzlau, 17 m. NW of Jung-Bunzlau, and 26 m. W of Leitmeritz, in a marshy valley. Pop. 1,946. It is encircled by an old and ruinous wall. Its streets are narrow, and houses lofty. It has manufactories of calico, hosiery, and printed muslin.

**HIRSCHENSTAND**, a village of Bohemia, in the circle and 16 m. N of Elmhagen, and 42 m. W of Saatz. The chief article of manufacture here is lace, which, in this and 16 neighbouring villages, gave occupation in 1820 to 8,561 individuals. It has also a manufactory of alum, and one of vitriol.

**HIRSCHFELD**, or **HIRSCHFELDE**, a town of Saxony, in the circle and 29 m. SE of Bautzen, on the l. bank of the Neisse, 5 m. NE of Zittan. Pop. 1,551. It has manufactories of linen and cotton fabrics.—Also a village of Bavaria, in the circle of Lower Franconia, on the Main. Pop. 456.

**HIRSCHFELD**. See **HEERSFELD**.

**HIRSCHHAUSEN**, a village of the duchy of Nassau, bail. and 3 m. ESE of Weilburg. Pop. 270.

**HIRSCHHOLM**, a town of Denmark, in the stift and island of Seeland, bail. of Frederiksborg, 13 m. SSW of Elsinore, and 15 m. N of Copenhagen, on the confines of a forest near the Sound. Pop. 300. It

contains a magnificent royal castle, which was the residence of Queen Matilda.

**HIRSCHHORN**, a town of the grand duchy of Hesse-Darmstadt, capital of a district in the prov. of Starkenburg. 10 m. ENE of Heidelberg, and 37 m. SSE of Darmstadt, on the slope of a hill, near the r. bank of the Neckar, at the confluence of the Finkenbach. Pop. 1,694. It is ill-built; and, with the exception of the castle and a church, possesses no buildings worthy of note. Several important fairs are annually held here. Pop. of district 4,487.

**HIRSCHLAND**, a village of Switzerland, in the cant., bail, and  $1\frac{1}{2}$  m. SE of Zurich. It has on the Muhlbach an extensive iron-work.

**HIRSCHOVA**. See **HIRSAU**.

**HIRSINGUE**, or **HIRSINGEN**, a canton, commune, and town of France, in the dep. of the Haut-Rhin, arrond. of Altkirch. The cant. comprises 25 com. Pop. in 1831, 12,910; in 1841, 13,473. The v. is 3 m. SSE of Altkirch. Pop. 1,281.

**HIRSON**, a canton, commune, and town of France, in the dep. of the Aisne, arrond. of Vervins. The cant. comprises 13 com. Pop. in 1831, 14,042; in 1841, 15,246. The town is 11 m. NE of Vervins, and 35 m. NNE of Laon, on the Oise. It has several forges, foundries, and nail-works; and manufactories of fine thread, common pottery, and baskets. It has numerous annual fairs. This town was formerly defended by a castle, which, in 1650, was taken and destroyed by the Spaniards.

**HIRTSHOLMEN**, a group of small islands, 3 in number, in the Cattagat, near the coast of the bail. of Hioring, Jutland, 4 m. ENE of Frederikshaven, in N lat.  $57^{\circ} 28'$ , E long.  $10^{\circ} 38'$ . They belong to the diocese of Aalborg, and bail. of Hioring, and are inhabited by about 80 fishermen.

**HIRTZBACH**, a village of France, in the dep. of the Haut-Rhin, cant. and  $1\frac{1}{2}$  m. WNW of Hirsingen, on the l. bank of the Ill. Pop. 680. Near this place are mines of coal.

**HIRZBODEN**, a small district of Switzerland, in the cant. and 27 m. SSE of Berne, and bail. of Frutigen, towards the centre of the valley of Aldboden. It has a sulphureous spring.

**HIRZEL**, a village of Switzerland, in the cant. and 12 m. SSE of Zurich, bail. and 4 m. W of Wädenschwyl. Pop. of p. 1,100.

**HIRZENACH**, a village of Prussia, in the prov. of the Rhine, regency of Coblenz, and circle of St. Goar. Pop. 400.

**HIRZENHAIN**, a village of the grand duchy of Hesse-Darmstadt, prov. of Upper Hesse, district and 5 m. ESE of Nidda, and the same distance N of Bidingen, on the Ridder. Pop. 249. It has iron-works, which afford an annual supply of about 1,800 quintals of iron.

**HISINGEN**, an island near the W coast of Sweden, in the prefecture of Gottenburg, in N lat.  $57^{\circ} 46'$ , E long.  $11^{\circ} 54'$ . It is formed by the two arms of the Goeta-Elf and the Cattagat; and is 17 m. in length from NE to SW, and 9 m. at its greatest breadth. It is divided into two haerads, named E. and W. Hisingen. The town of Gottenburg originally stood on this island.

**HISPAGNAC**, or **HISPANHAC**, a town of France, in the dep. of the Lozere, cant. and 5 m. NW of Florac, and 11 m. S of Mende, in a fine valley, on the r. bank of the Tarn. Pop. 1,405. It has a cotton spinning-mill, and a manufactory of cotton and linen handkerchiefs. In the vicinity is a mine of iron.

**HISPANIOLA**. See **HAYTI**.

**HISSAMPUR**, a town of Hindostan, in the prov. and 48 m. NW of Oude, district and 24 m. S of Baraitene, near the r. bank of the Gogra.

**HISSAR**, a district and town of Turan. The district lies to the S of the Kokan, to the SE of the khanat of Bokhara, and to the NW of Budakshan, between the Tonpalak on the W, and the Jihon on the SE. It is generally mountainous, and is intersected by the Kafernikan or Hissar, an affluent of the Jihon. The town, which is fortified, is 160 m. SE of Samarcand, and 200 m. NW of Budakshan, near the l. bank of the Kafernikan. —Also a town of Hindostan, in the presidency of Bengal, prov. and 105 m. WNW of Delhi, and 15 m. W of Hansi. It was formerly cap. of the circar of Hissar-Ferozeh, now forming the division of Hurriana, but is now little more than a mass of ruins; and, with the exception of its fortress, —the palace of the Sultan Feroze, —has nothing to render it of any importance. The locality in which it is situated is parched and sandy, and the canals formed for its irrigation by the Sultan Feroze have been suffered to fall into disrepair. —Also a fortress of Turkey in Europe, in Bulgaria, in the sanj. of Sophia, 25 m. NNE of Philippopolis.

**HISSARDJIK**, a village of Turkey in Europe, in Rumelia, sanj. of Sophia, 15 m. NW of Tatar-Bazardjik, and 35 m. WNW of Philippopolis. —Also a v. of Anatolia, 4 m. W by N of Bunarbashi. Here are the ruins of New Ilium, and 3 m. onward, in the same direction, is Mount Tepe, the tumulus of Ajax.

**HISTON**, a parish in the co. of Cambridge, 4 m. NNW of Cambridge. Area 2,300 acres. Pop. 1,011.

**HIT**, the ancient *Is*, a town of Turkey in Asia, in the pash. and 114 m. W of Bagdad, on the r. bank of the Euphrates, 53 m. by water, and S 36 m. E in a direct line from Hadisah. It contains about 1,500 houses, built all round an elongated hill rising from and parallel to the river. The houses are chiefly of clay, one or two stories high, flat-roofed, and covered with a layer of bitumen. The streets are narrow, dirty, and steep. The hill and town are enclosed by a high mud wall, with semicircular towers, but no ditch. One graceful minaret appears amidst this mass of brown clay. H. is celebrated for its bituminous fountains, and its boats covered with bitumen. These boats are generally used to carry bitumen, salt, and lime, to Hillah, Bosrah, and even to Bagdad. Boat-building, burning lime, making salt, and preparing naphtha, form the chief occupations of the inhabitants. The bitumen is got from springs  $\frac{3}{4}$  m. W of the town. These springs throw out a dark-coloured water, of a temp. of about  $160^{\circ}$  F., which is carried off slowly by an aqueduct; an oily substance gathers on the top, which is skimmed off and laid in pits exposed to the air, in which it speedily hardens into flakes of about an inch thick, which are sold at H. for about  $2\frac{1}{2}$ d. per cwt.

**HITA**, a town of Spain, in New Castile, in the prov. of Guadalajara, and partido of Brihuega.

**HITCHAM**, a parish in Buckinghamshire, 5 m. WNW of Windsor, on the banks of the Thames. Area 1,370 acres. Pop. in 1831, 232; in 1851, 236. —Also a p. in Suffolk,  $1\frac{1}{2}$  m. N of Bildeston. Area 4,117 acres. Pop. in 1831, 1,022; in 1851, 1,037.

**HITCHCOCKVILLE**, a village of Barkhamstead township, Litchfield co., in the state of Connecticut, U. S., 26 m. NW of Hartford, on the W branch of Farmingham river. In 1840 it consisted of about 25 dwellings.

**HITCHENDEN**, or **HUGHENDEN**, a parish in Buckinghamshire,  $1\frac{1}{2}$  m. N of High Wycombe. Area 5,751 acres. Pop. in 1831, 1,457; in 1851, 1,541.

**HITCHENDERRY**, a town of Hindostan, in the state of Nepal, district of Morung, on the frontier of Bengal, 45 m. N of Purneah, and 54 m. ESE of Amarpur. It is a considerable emporium for the trade between Bengal and Nepal.



**HITCHIN**, a parish and market-town in Hertfordshire, 17 m. NW of Hertford. The p. includes the hamlets of Missenden, Preston, and Temple-Disney. Area 6,457 acres. Pop. in 1801, 3,161; in 1831, 5,211; in 1851, 7,077. The church is a handsome structure in the pointed style, near the middle of the town. The town is situated in a delightful valley, sheltered by eminences, and consists of several streets and lanes of generally well-built houses. The wool trade was formerly flourishing here. Its chief business at present is in malt and corn.

**HITERO-DEL-CASTELLO**, or **ITERO-DEL-CASTILLO**, a town of Spain, in Old Castile, in the prov. and 28 m. W of Burgos, and partido of Castrojeriz. Pop. 274.

**HITERO-SECO**, or **ITERO-SECO**, a town of Spain, in Leon, in the prov. of Palencia, and partido of Saldaña, 10 m. NNE of Carrion-de-los-Condes. Pop. 364.

**HITERO-DE-LA-VEGA**, or **ITERO-DE-LA-VEGA**, a town of Spain, in Leon, in the prov. and 22 m. NE of Palencia, and partido of Astedillo, on the r. bank of the Abanades. Pop. 562.

**HITO**, a town of Spain, in New Castile, in the prov. and 39 m. WSW of Cuenca, and partido of Belmonte, on a hill. Pop. 513. In the vicinity is an extensive pond, abounding with aquatic birds; and at a short distance are the ruins of the ancient *Bayona*.

**HITTDORF**, a town of Prussia, in the prov. of the Rhine, regency of Dusseldorf, and circle of Solingen. Pop. in 1837, 1,594. It has a manufactory of tobacco, and possesses a considerable trade in grain, wine, wood, and coal.

**HITTEREN**, an island of the Atlantic, near the W coast of Norway, in the stift of S. Trondheim, and 40 m. W of Trondheim, in N lat.  $63^{\circ} 30'$ . It is 30 m. in length, and about 12 m. in average breadth. Pop., including several small adjacent villages and islands, 3,700. The rearing of cattle, and fishing, form the chief objects of local industry.

**HITEROE**, a small island of the North sea, near the coast of Norway, stift of Christiansand, bail. of Mandal, at the mouth of the Quinisdal, in N lat.  $58^{\circ} 13'$ , and E long.  $6^{\circ} 30'$ . Pop. 1,160. It is fertile, and has a parish church.

**HITTISLEIGH**, a parish in Devonshire,  $7\frac{1}{4}$  m. WSW of Crediton. Area 1,155 acres. Pop. in 1831, 168; in 1851, 185.

**HITU**, or **HIROE**, a mountainous peninsula, forming the larger part of the island of Amboyna, in the Molucca archipelago. It is 60 m. in length, and 8 m. in breadth, and is connected by the isthmus of Baguala with Leytimor.

**HITU**. See **IRU**.

**HITZACKER**, a town of Hanover, cap. of a bail., in the principality and 33 m. ESE of Lüneburg, and 11 m. W of Dometz, on an island formed by the confluence of the Jeetze with the Elbe. It has a castle, a church, and a custom-house, and possesses a considerable trade in grain and thread. Pop. of bail., 3,650.

**HITZING**, a village of the archduchy of Austria, in the prov. of Lower Austria, lower circle of the Wiener-wald, 5 m. WSW of Vienna, and  $1\frac{1}{2}$  m. W of Schoenbrunn. Pop. 930. It has manufactories of carpets, liqueurs, and vinegar; and is surrounded by numerous villas.

**HITZKIRCH**, or **HISKIRCH**, a village of Switzerland, capital of a circle, in the cant. and 13 m. N of Lucerne, bail. and 5 m. NNW of Hochdorf, near the N extremity of Lake Baldegg. Pop. of parish, 3,224.

**HIVES**, a department and commune of Belgium, in the prov. of Luxemburg, arrond. of Marche. Pop. of dep., 383; of the com., 286.

**HIVITURUHI**, or **HIVITUAHI**, a name by which the Serro Frio, an extensive mountain-chain in Brazil, in the prov. of Minas-Geraes, is distinguished by the Indians, and like the Portuguese appellation, denoting the extreme coldness of the winds which prevail upon these mountains.

**HIWASSEE**, or **HIGHWASSEE**, a river which has its source on the NE confines of the state of Georgia, U. S., in Rabun co., flows thence through the SW corner of the state of North Carolina, enters the state of Tennessee, passes through the N part of the territory of the Cherokees, and along the S confines of the counties of M'Minn and Rhea, and falls into the Tennessee, on the l. bank, opposite Hiwassee garrison, in Hamilton co. It has an entire course in a generally NW direction of about 75 m., and is partly navigable.

**HIWEL**, a village of Bohemia, in the circle and 14 m. WNW of Policzka. In the environs are mines of iron.

**HIX'S FERRY**, a village of Randolph co., in the state of Arkansas, U. S., 170 m. NE of Little Rock, at the crossing of Carrant river.

**HJERTING**, or **HIERTING**, a town of Denmark, in the stift and 23 m. NW of Ribe, on an extensive estuary of the same name. Pop. 200. It has a small port and a custom-house. The estuary or bay of H. forms an arm of the German ocean, to the N of the island of Fanø, 9 m. in length, and 3 m. in breadth, enclosed on the N and W by the Skallingin, a sandy peninsula. The Varde-aae flows into it in the NW. The port of H. has been used for some years past as an occasional harbour for steamers engaged in the cattle trade, for which it is admirably adapted by nature when compared with other ports on this dangerous coast. Protected by the Skallugin on the N and W, and by Fanø on the S, and thus sheltered from the tempestuous winds that have blown so many vessels to destruction on Jutland, H. is almost the only point on the W of that district which combines safety with facility of access; while, in the event of very bad weather, the harbour of List, in the island of Silt, which lies a little to the S, offers the most secure holding ground and the most prominent landmarks from the Elbe to the Skaw. In the channel of H. there is good bottom, with 12 ft. of water at ebb tide; and there is no point on the coast so capable of developing the staple trades of Denmark in corn and cattle as this obscure port. The great cattle-district, covering an area of 457 geog. m., lies N and S of it; and 30,000 head of poor cattle and 10,000 horses have been carried annually through this district to Schleswig and Holstein to be grazed in the marsh lands. The passage to England, between this port and Lowestoft, which the Northern Steam-packet company attempted to open up in 1851, is at once the shortest and cheapest. Between H. and Lowestoft the distance is but 300 nautical m., the average passage may be reckoned at from 24 to 28 hours; and the Danish government have had under consideration a plan for a railroad to Fredericia, which would open rapid communication between England and all the capitals of Northern Europe. The mails transmitted by this route left London at 5 o'clock on Saturday and reached H. about 1 o'clock on Monday; and the land-journey from H. to Copenhagen may be taken at 36 hours, by Holsted, Kolding, Middelfahrt, Odensee, Nyeborg, Korsør, Ringsted, and Roeskilde. But the steamers have, we understand, been withdrawn from this route after a few months' trial.

**HJO**, a small town of Sweden, in the län and 30 m. SSE of Mariestadt, on the W bank of Lake Wetter. Pop. 570.

**HJORRING**. See **HIORRING**.

HLASSA. •See LASSA.

HLAUPJETIN, a village of Bohemia, in the circle and 23 m. NW of Kaurzim, and 18 m. NE of Prague. It has manufactories of alum and vitriol.

HLINSKO, a town of Bohemia, in the circle and 17 m. S of Chrudim, and 27 m. ESE of Czeaslau, on the Chrudimka. Pop. 3,264. It has manufactories of linen and of pottery.

HLUBOSCH, a village of Bohemia, in the circle and 17 m. S of Beraun, and 28 m. E of Pilsen, on the r. bank of the Latawka. It has a castle, with a park, and possesses manufactories of pins and of iron-ware.

HLUBZIEN. See LEBSCHUTZ.

HLUK, a town of Moravia, in the circle and 8 m. SE of Hradisch, and 7 m. WSW of Ungarisch-Brod. Pop. 1,920. It has a castle. The vine is extensively cultivated in the environs.

HO, or HENG, a mountain of China, in the prov. of An-hoei, dep. of Lu-chu-fu. It is the most southerly of the four Yo or mountains which represented the 4 cardinal points, and at which certain religious ceremonies were periodically performed by the sovereign.

HOADLIN, a township of Van-Wert co., in the state of Ohio, U. S. Pop. in 1840, 40.

HOAI-HO. See HWAE-HO.

HOANG-HO, or HWANG-HO, [*i. e.*, the 'Yellow river,'] a great river of China, the RATCHU of the Tibetians, and KARA-MUREN or KHATUN-GOL of the Mongolians, which is generally supposed to have its source in the W part of the desert of Koko-Nor, to the SW of the lake of that name, in about N lat. 35° 35', and E long. 96° 10'. Descending in a SSE direction through a wide valley, it forms lakes Tcharing and Oring, and the nenters another valley bordered on the E by steep rocks. At the E extremity of this rocky ridge it bends abruptly to the WNW; makes an extensive circuit, and then crosses the frontier of the Chinese prov. of Kansu, 70 m. W of Lan-chu, in N lat. 36°, and E long. 102° 20', and after having run a distance of 700 miles. After traversing the NW part of the prov. of Kansu, and forming for some leagues its line of separation from Mongolia, it leaves China and pursues its course in a NE direction for 430 m., till it is deflected eastward by the range of the Tchastai-oola and Inchan mountains. At the point of deflection it divides into several small branches, and forms a number of lakes; but in its entire circuit of the Ortoos country, 500 m. in extent, it receives not a single stream of any size. About 110° 30' E long., it is deflected S by a spur of the latter chain, along the E confines of the country of the Ortoos, and re-entering China, flows between the provinces of Shan-si and Shen-si for about 500 m., till it enters the Great plain, at a point distant from Lan-chu 1,130 m. At this part of its course it becomes tinged with the clay from which both its colour and its Chinese name are derived. At the SW corner of Shan-si, where it receives the Wei, its largest tributary, it bends abruptly eastward, along the S confines of Shan-si, and into the prov. of Honan. Then taking an ESE direction, after forming the boundary-line between the provs. of Shantung and Honan for a distance of about 50 m., it flows into the prov. of Kiang-su, and, after receiving the Hwae-ho, bends ENE, and falls into the Yellow sea, in N lat. 34°. The area of its basin is estimated at 700,000 sq. m.; and although its source is only 1,290 m. in a direct line from its mouth, its numerous windings prolong its course to nearly double that distance. Its mouth is only 150 m. N of the embouchure of the Yang-tse-kiang-keou, and its source is at no great distance from the sources of that river; yet between their lines of route there is an interval at some points of upwards of 900 m.—Of the nu-

merous affluents of the H., the principal are, on the r., the Tura-Kündulen in Kokonor, the Cucur-su, or Tie-tsan-ho, and the Kan-kou-chou in Kan-suh; the Kin-ye-ho, Vou-tin-ho, Yen-ho, Lo-ho, and Hoei-ho in Shen-se; and in Kiang-su the Hoai-ho or Hwae-ho, the feeder of Lake Hong-tse. On the l. it receives the Olan-muren or Tai-tong in Kan-suh, the Khara-yol on the confines of the Ortoos country, and in Shan-se the Fuen-ho. The En-ho, or Imperial canal, runs for a considerable distance along its l. bank, and crosses it near the confluence of the Hwae-ho. With the exception of the Nile, the H. receives fewer important tributaries than any other large river in the world. The principal mountain-chains by which the basin of the H. is enclosed are the Holang-chan or Alajin-alim, Keptel-oola, Tchastai-oola, and Inchan-oola, on the N; and on the S separating it from the basin of the Yang-tse-kiang, the Bain-khara-oola, Naktomchi, and Ratchico mountains, the Pe-ling or Northern mountains, the Tein-ling or Tich-ling, and Tan-sia or Chan mountains. Lan-chu, Ning-hea, Kae-fung, Su-chu, and Hwae-gan are the most important towns situated on its banks. In the lower part of its course this river flows with great rapidity, and it is only by means of extensive dikes and embankments that its waters are restrained from devastating many of the districts through which it flows. In breadth it varies from 800 to 1,200 yds., and its depth is also very unequal. There are considerable indications that this river has greatly changed its course, and that it formerly discharged itself into the gulf of Chih-le.

HOANNA, or HAANNA, one of the Hapaii islands, in the Friendly archipelago, in the South Pacific, in S lat. 19° 39', and E long. 174° 39'.

HOAPIN-SU, one of the Madjicosemah islands, in the Tong-hai or Eastern sea, 75 m. NE of Formosa, in N lat. 25° 43', and E long. 122° 55'. It is low and woody.

HOAR-FROST RIVER, a stream which flows into the E end of Great Slave lake, in the NW territories of America, in a series of appalling cascades and rapids.

HOATHE, a parish in Kent, 5½ m. NE of Canterbury, N of the Stour. Area 898 acres. Pop. in 1831, 360; in 1851, 359.

HOATHLEY (EAST), a parish in Sussex. Area 2,000 acres. Pop. 667.

HOATHLEY (WEST), a parish in Sussex. Area 4,420 acres. Pop. 1,068.

HOBACH, a town of Arabia, in the mountainous part of Yemen, 21 m. E of Denn, and 81 m. S of Sana.

HOBART, a village of Stamford township, Delaware co., in the state of New York, U. S., 65 m. WSW of Albany, on the head-waters of Delaware river. Pop. in 1840, 300.

HOBART-TOWN, the capital of Tasmania, or Van Diemen's Land, built on the l. bank of the Derwent, about 20 m. from its mouth in S lat. 42° 52', E long. 147° 21'. Its streets are wide, but unpaved, and much cut up by the constant transit of carts and cattle; the houses are mostly of brick. The public buildings consist of a large brick church, a court-house in which the supreme court holds about four sittings in the year, the governor's residence, government storehouse, military barracks, prisoners' barracks, penitentiary, and jail. Besides the Episcopal church, there are Wesleyan, Independent, Presbyterian, and Roman Catholic chapels here; also three public banks, a public school, several private seminaries, and several extensive manufactories connected with the staple commodities of the island. The total number of inhabitants, including those of the immediate suburbs, the prisoners and military, is about 12,000. Two or three newspapers are pub-

lished here weekly. House rents are very high, and living is dear. In 1848, 10 vessels under 50 tons, 4 under 100, 3 under 200, and 1 above 300 tons, were built here. A basin 300 ft. long, and 200 ft. wide, with a depth of 9 ft., at low water of spring-tides, is in course of formation, for the accommodation of the small river-craft; and there is a depth of from 10 to 15 ft. at low water alongside the wharves. The number of vessels belonging to the port on 31st Dec., 1848, was 162 = 14,640 tons.—The mean temp. at H. in 1846 was 53° 1.; for 1847, 53° 2.; for 1848, 52° 3. The following table shows the mean pressure and temperature during 1848, at the Royal observatory. The cistern of the barometer is 107 ft. above the level of mean tide, causing a depression in the mercurial column of about 0° 1.

1848.	Bar. during the month.		Fahr's ther. during the month.		Mean for the whole month.	
	Max.	Min.	Max.	Min.	Bar.	Ther.
	Inch.	Inch.	°	°	Inch.	°
January, . . .	30.166	28.952	82.7	43.0	29.737	60.2
February, . . .	30.276	29.477	81.0	42.7	29.950	59.3
March, . . .	30.212	29.218	81.0	47.3	29.743	59.6
April, . . .	30.373	29.173	77.2	39.6	29.790	56.9
May, . . .	30.184	29.180	67.0	34.2	29.740	49.1
June, . . .	30.402	29.392	59.0	34.7	29.041	45.8
July, . . .	30.370	29.407	54.3	31.3	30.004	42.8
August, . . .	30.297	28.760	57.8	35.3	29.722	45.3
September, . .	30.242	28.506	72.0	36.2	29.549	48.6
October, . . .	30.226	29.051	72.0	39.0	29.698	50.4
November, . . .	29.938	28.938	74.7	40.0	29.442	53.3
December, . . .	30.110	28.869	86.6	39.8	29.550	56.7

The quantity of rain which fell in 1842 was 22.84 inches; in 1845, 15.89 inches; in 1848, 23.67 inches.

—The H. district has an area of 828,160 acres, of which 6,310 were under cultivation in 1848. The quantity of stock in the district was 1,806 horses, 3,041 horned cattle, 9,811 sheep, 845 goats, 3,307 pigs. Pop. 21,249. Houses 4,014. A fine road, 120 m. in length, now connects H. with Launceston.

**HOBIGUNGE**, a town of Hindostan, in the prov. of Bengal, district of Backergunge, 40 m. SSW of Dacca, pleasantly situated between two arms of the Ganges.

**HOBKIRK**, or **HOPEKIRK**, a parish in Roxburghshire, 6 m. ESE of Hawick. Pop. in 1801, 760; in 1851, 720. All the p., except the SW corner, consists of the vale of the Rule. It contains several mountain-summits. The most remarkable mountains are Winbrough, Fanna, Rubberslaw, and Bonchester. The first and second, situated in the S extremity of the p., rise to about 1,600 ft. above the level of the sea, and have such breadth of base as to be each 1½ m. in ascent to the summit. Winbrough looks out over the great intervening distance, in each case of about 40 m., upon the marine waters which gird both the W and the E coasts of Scotland. Rubberslaw, situated near the N extremity, on the boundary with Kirkton and Cavers, and belonging partly to these parishes, lifts its dark, rugged, heath-clad form 1,420 ft. above the level of the sea. Bonchester, on the E side of the p., a little N of its middle, rises to the height of about 1,260 ft., and presents to the eye a round-shouldered and grassy mountain-form of beauty.

**HOB-LINCH**, or **ABBOT'S LENCH**, a hamlet in Fladbury p., Worcestershire, 5½ m. NNE of Pershore. Area 870 acres. Pop. in 1831, 116; in 1851, 73.

**HOBOKEN**, a department, commune, and village of Belgium, in the prov. and 4 m. SW of Antwerp, on the r. bank of the Schelde. Pop. of dep. 2,393. It has manufactories of woollen fabrics and wax-cloth.—Also a village of Bergen township, Hudson co., in the state of New Jersey, U. S., 60 m. NE of Trenton, on the W bank of Hudson river, opposite New York.

**HOBORG**, a mountain of Sweden, at the S extre-

mity of the peninsula which forms the S part of the island of Gottland, in N lat. 56° 56', E long. 8° 20'. The peninsula forms a small district of the same name.

**HOBROE**, a town of Denmark, in the stift and 39 m. NNW of Aarhus, and bail. of Randers, 32 m. S of Aalborg, at the extremity of the Mariager-fjord. Pop. 700. It consists of a principal and 5 lateral streets, and contains 2 market-places, a church, and a town-house. It has several distilleries.

**HOBSCHIED**, a department and commune of Belgium, in the prov. of Luxemburg, and arrond. of Arlon. Pop. 1,879.

**HOBY**, a parish in Leicestershire, 6 m. SW of Melton-Mowbray, on the Wreak. Area 1,060 acres. Pop. in 1831, 357; in 1851, 405.

**HOC (Le)**, a promontory of France, in the dep. of the Seine-Inferieure, cant. of Ingouville, 5 m. E of Havre, on the r. bank of the Seine, near the embouchure of the Lezarde.

**HOCANGE**, a district in the N part of Lower Guinea, to the S of the district of Inzico, and on the r. bank of the Zaire. It is said to be large and populous.

**HOCHBERG**, a village of Bavaria, in the circle of Lower Franconia, to the W of Wurzburg. Pop. 1,060.—Also a v. of Baden, in the circle of the Upper Rhine.—Also a v. of Württemberg, in the circle of the Neckar, to the E of Ludwigsburg. Pop. 680.

**HOCHDORF**, a village of Bavaria, in the circle of the Pfalz, to the SE of Durkheim. Pop. 538.—Also a bailliage, circle, parish, and village of Switzerland, in the cant. and 9 m. N of Lucerne, about 1½ m. S of the Baldegger-See. The bail. comprises 3 circles, viz.: Hetzkirch, Hochdorf, and Rothenburg, and contains 16 parishes. Pop. 16,787. It produces corn, fruit, and wine, the two former in great abundance, and pastures large numbers of cattle.

**HOCHEN**, a village of Bavaria, in the circle of the Pfalz, on the Höcher-Berg, to the W of Waldmohr. Pop. 470.

**HOCHFELD**, or **HOCHFELDEN**, a canton, commune, and town of France, in the dep. of the Bas-Rhin, arrond. of Saverne. The cant. comprises 21 com. Pop. in 1831, 17,239; in 1841, 17,058. The town is 10 m. ENE of Saverne, and 16 m. NW of Strasburg. Pop. in 1841, 2,503. A general fair is held here once a-year.

**HOCH-GOLLING**, a summit of the Noric Alps, on the confines of the archduchy of Austria and of Styria, 60 m. SW of Salzburg, and rising to the height of 9,459 ft. above sea-level.

**HOCHHEIM**, an amt or bailiwick and town in the duchy of Nassau, 7 m. SE of Wiesbaden, and 39 m. S of Weilburg, on an eminence, near the r. bank of the Main, a little above the confluence of that river with the Rhine, and on the Taunus railway. Pop. 1,971. The environs are noted for their wine. Pop. of bail. 10,783.

**HOCHHOLDINGEN**, a town of Bavaria, in the circle of Middle Franconia, 5 m. NW of Oettingen. Pop. 914.

**HOCH-HORN**, one of the principal summits of the Noric Alps, on the confines of the archduchy of Austria and of Illyria, 57 m. S of Salzburg. It rises to the height of 11,355 ft. above sea-level.

**HO-CHI-CHU**, a district and town of China, in the prov. of Kwan-se, and division of King-yuen-fu, 50 m. NNE of Wu-chu-fu, on an affluent of the Long-kiang, in N lat. 36° 3'.

**HO-CHING**, a district and town of China, in the prov. of Shan-tung, division of E-chu-fu.

**HOCHKIRCH**, a village of Saxony, in the circle of Lausatia, 7 m. SE of Bautzen, on a height. It is memorable for the defeat of the Austrians under



Field-marshal Daun, which took place here on the 14th October 1758.—Also a v. of Prussia, in the prov. of Silesia, and circle of Leignitz, SE of Glogau. Pop. 200.

**HOCH-KOGL**, a mountain of the archduchy of Austria, in Upper Austria, circle and 42 m. SW of Salzburg, and 15 m. SE of Kitzbuhel, in the Pinzgau. It rises to the height of 9,562 ft. above sea-level.

**HOCH-NARR**, or **HOHESNARR**, a summit of the Noric Alps, on the confines of the archduchy of Austria and of Illyria, to the S of Salzburg, and 12 m. E of the Gross-Glockner. It rises to the height of 11,640 ft. above sea-level.

**HOCHSAL**, a village of the archduchy of Baden, bail. and 3 m. NE of Kleinlaufenburg, and 22 m. E of Bale. Pop. 380. It has several silk and cotton spinning-mills.

**HOCHSPEYER**, a village of Bavaria, in the circle of the Pfalz, bail. and 6 m. E of Kaiserslauten. Pop. 1,296.

**HOCHST**, a market-town of the grand duchy of Hesse-Darmstadt, in the prov. of Starkenburg, and district of Brenberg, 4 m. WSW of Neustadt, and 22 m. ESE of Darmstadt, on the l. bank of the Mumlung. Pop. 1,320.—Also a bail. and town in the duchy of Nassau, 6 m. W of Frankfort, and 33 m. W of Weilburg, on the r. bank of the Main, near the influx of the Nidda, and on the Taunus railway. Pop. 1,800. It has a church, and possesses extensive manufactories of tobacco, chemical substances, vermicelli, chicory, cabinet-work, needles, and nails. It has also a cotton spinning-mill, and several lime and gypsum-kilns. This town suffered much during the military operations of the French in 1796. Pop. of bail. 11,605.

**HOCHSTADT**, or **HOCHSTEDT**, a langericht-bezirk, or presidial and town of Bavaria, in the circle of Suabia, on the l. bank of the Danube, and on the Nuremberg and Neuenmarkt railway, 24 m. NW of Augsburg, and 32 m. WSW of Neuburg. Pop. 2,460. It is defended by an old castle, which stands on an adjacent height, and has 2 churches, and an hospital. The environs have been the theatre of several sanguinary battles. In 1703 the Imperialists were here defeated by the French and Bavarians; the following year Marshal Tallard was here defeated and made prisoner by Marlborough, in what is usually called the battle of Blenheim.—Pop. of bail. 11,605, of whom a large proportion are Catholics.

**HOCHSTADT**, or **HOCHSTATT**, a presidial and town of Bavaria, in the circle of Upper Franconia, 18 m. WSW of Bamberg, and 25 m. NNW of Nuremberg, on the l. bank of the Aisch, which is here crossed by a bridge. It has a castle, 2 churches, an hospital, and a classical school. Pop. 1,713. It has several spinning-mills and breweries. Hops are extensively cultivated, and cattle are reared in great numbers in the environs. Pop. of presidial 11,834.—Also a town of Hesse-Cassel, in the prov. and circle of Hannau. Pop. 747.

**HOCHSTADT**, **WISOKEY**, or **WISOKEY**, a small town of Bohemia, in the circle of Bunzlau, 32 m. NE of Jung-Bunzlau. Pop. 1,604. In the vicinity is a mine of iron.

**HOCHSTATT**, or **HOCHST**, a commune of France, in the dep. of the Haut-Rhin, cant. of Altkirch. Pop. 1,068.

**HOCHSTATTEN**, or **HOSDAT**, a district of Transylvania, towards the centre of the comitat of Hunyad. It contains a few villages, one of which bears the same name.

**HOCHSTETTEN**, a village of Baden, in the circle of the Rhine, SE of Breisach.—Also a v. in the circle

of the Middle Rhine, on the banks of the Rhine. Pop. 462.

**HOCHSTETTEN** (Gross), a parish and village of Switzerland, cant. and 10 m. SE of Berne, amt of Honolingen. Pop. (Protestant) 4,163.

**HO-CHU**, a division and town of China, in the prov. of Shan-se. The div. comprises 2 districts.—Also a district and town in the prov. of Kan-suh, div. and 60 m. SW of Lan-chou-fu, on an affluent of the Hoang-ho.—Also a district and town in the prov. of Sze-chuen, div. of Chun-king-fu, in N lat. 30° 8' 24".

**HOCH-VOGEL**, a mountain on the confines of Bavaria and Tyrol, 48 m. ENE of Innsbruck, and 81 m. SSW of Augsburg. It belongs to that branch of the Arlberg which separates the Lech and Iller, and rises to the height of 959 ft. above sea-level.

**HOCH-WALD**, or **HOHE-WALD**, a mountain-range in Prussia, in the prov. of the Rhine, circle of Treves, extending along the confines of the duchy of Oldenburg, from the r. bank of the Saar to the Idarwald, which connects it with the Hundsrück.

**HOCHWIESEN**, or **VELKOPOLYA**, a town of Hungary, in the comitat of Bars, 9 m. NNW of Ujbunya, and 20 m. S of Krennütz. Its inhabitants are chiefly Germans.

**HOCHZEIT**, a village of Prussia, in the regency and SE of Danzig. Pop. 274.

**HOCKAI**, a commune of Belgium, in the prov. of Liege, dep. of Francorchamps. Pop. 119.

**HOCKELBACH**, a commune of Belgium, in the prov. of Liege, dep. of Henri-Chapelle. Pop. 142.

**HOCKENDORF**, a village of Saxony, in the circle of Erzgebirge, bail. and 5 m. NW of Dippoldiswalde, and 11 m. SE of Dresden. In the environs is a mine of silver.—Also a village in the circle of Meissen, bail. of Radeberg and Lausnitz, 15 m. NNE of Dresden. Linen is extensively manufactured in the locality.

**HOCKENHEIM**, a village of Baden, in the circle of the Neckar, bail. and 5 m. S of Schwetzingen, and 13 m. SW of Heidelberg. Pop. 1,506. Tobacco is extensively cultivated in the environs.

**HOCKENHULL-STAPLEFORD**, a township in the p. of Tarvin, Cheshire, 5½ m. E of Chester. Area 330 acres. Pop. in 1831, 35; in 1851, 32.

**HOCKERING**, a parish in Norfolk, 5½ m. E of East Dereham. Area 1,931 acres. Pop. in 1831, 438; in 1851, 420.

**HOCKERTON**, a parish in Nottinghamshire, 2 m. NNE of Southwell, on a branch of the Trent. Area 1,373 acres. Pop. in 1831, 108; in 1851, 114.

**HOCKHAM**, a parish in Norfolk, 5 m. NW of East Harling. Area 3,406 acres. Pop. in 1851, 690.

**HOCKHOCKING**, a river of the state of Ohio, U. S., which has its source in Fairfield co., to the NW of Lancaster; runs SE through the cos. of Hocking and Athens; and, after a meandering course of about 90 m., falls into the Ohio, on the r. bank, at Troy, 25 m. below Marietta, and to the SW of the confluence of the Little Kenuawha. The bed of this river is narrow but deep, and it is navigable to the falls, which it forms above Athens—a distance of 42 m. Its banks are high, and in some parts contain valuable mines of lead, iron, and coal, and inexhaustible quarries of free-stone.

**HOCKING**, a central county in the state of Ohio, U. S., comprising an area of 432 sq. m., generally hilly, and watered by Hockhocking river and the head-waters of Racoon and Salt creeks. Pop. in 1840, 9,741. Its capital is Logan.—Also a township of Fairfield co., in the same state, containing the villages of Lancaster and Hamburg. Pop. 2,137.

**HOCKLEY-SUPER-MONTE**, a parish in Essex, 2½ m. NNE of Rayleigh. Area 4,614 acres. Pop. in 1831, 777; in 1851, 838.

**HOCKLIFFE**, a parish in Bedfordshire,  $4\frac{1}{2}$  m. NW of Dunstable, and  $3\frac{1}{2}$  m. from the Leighton station of the London and North-Western railway. Area 1,021 acres. Pop. in 1831, 460; in 1851, 439.

**HOCKWOLD-CUM-WILTON**, a parish in Norfolk, 4 m. NW of Brandon, on the Little Ouse, Area 7,478 acres. Pop. in 1831, 878; in 1851, 1,067.

**HOCKWORTHY**, a parish in Devonshire,  $5\frac{1}{2}$  m. ESE of Bampton. Area 2,526 acres. Pop. in 1831, 335; in 1851, 382.

**HOCOULES**, a Slavonic people, who formerly inhabited the banks of the Dniester, but who, at the period of the Turkish and Tartar irruption into Russia and Poland, took refuge in the Carpathian mountains, and are now to be found on the confines of Galicia and Hungary. They are about 80,000 in number, and live in villages, each of which has its respective *voiatzka* or chief. Their dress consists of a white blouse reaching to the knees, and gaily trimmed with ribbon. Over this they throw a mantle of sheep's or wild beast's skin. They wear the hair long, and cover the head with a bonnet decked with ribbon and feathers. Their language is Russ, with a considerable admixture of other tongues. The rearing of cattle forms their only employment and means of subsistence.

**HODBECK**, a river of Yorkshire, which has its source near Trout's dale, and falls into the Derwent, near Wakeham.

**HODDAM**, a parish in Dumfriesshire, 4 m. N of Annan. Pop., comprising the v. of Ecclefechan, in 1801, 1,250; in 1851, 1,797.

**HODDESDON**, a chapelry and market-town, in the parishes of Amwell and Broxburn, Hertfordshire, 4 m. SE of Hertford, near a branch of the Eastern Counties railway. Area of chapelry 2,582 acres. Pop. in 1831, 1,615; in 1851, 1,854. The town is pleasantly situated about a  $\frac{1}{2}$  m. W of the Lea.

**HODEIDA**, a large town and port of Arabia, capital of a district in Yemen, on the Arabian gulf, 35 m. NW of Beit-el-Fakih, and 67 m. SSE of Lohia. The town is surrounded by a high wall; the houses, with the exception of those of the governor and principal inhabitants, and the town-house, are built of mud. It has a small castle. The port is good, but incapable of receiving large vessels. It is, however, much frequented by coasters engaged in the coffee-trade. The *dola* or governor depends immediately upon the imaum of Sanaa, from which H. is 3 days' journey. The district comprises little beyond the area of the town, and its revenues are chiefly derived from the duties imposed upon the export of coffee. The merchants are chiefly Indian Banians. In the environs is the tomb of Sadik, patron of the town. H. was taken by Abu-Arich, chief of the Wahabees; and subsequently seized by the pasha of Egypt.

**HODEN**, or **WODAN**, an oasis and town in the W part of the Sahara, about 250 m. from the Atlantic, and 47 days' journey WNW of Timbuctu, in N lat.  $19^{\circ} 30'$ , and W long.  $15^{\circ} 15'$ . It is inhabited by **TARZAS**.

**HODGDON**, a township of Aroostook co., in the state of Maine, U. S., 202 m. NNE of Augusta. Pop. in 1840, 665.

**HODGE-AHMET**, or **HAJI-AHMED (WADY)**, a valley and village of Fezzan, 70 m. NW of Murzuk, and intersected by the road which runs W to the oasis of Tuat.

**HODGESTON**, a parish in Pembrokeshire, 3 m. ENE of Pembroke. Pop. in 1831, 72; in 1851, 78.

**HODIMONT**, a department, commune, and village of Belgium, in the prov. of Liege, arrond. of Verviers. Pop. 2,600. The village is 12 m. E of Liege, and  $1\frac{1}{2}$  m. NW of Verviers, on the Vesder. Pop. 2,000. It has extensive manufactories of cloth and dye-works, several spinning and fulling mills, and an iron-foundry.

**HOBISTER**, a department and commune of Bel-

gium, in the prov. of Luxemburg, arrond. of Marche. Pop. 736.

**HODNET**, a parish in Salop,  $5\frac{1}{2}$  m. SW of Market-Drayton, on the Tern. Area 16,399 acres. Pop. in 1831, 2,097; in 1851, 2,057.

**HODOMONT**, a commune of Belgium, in the prov. of Namur, dep. of Bioul. Pop. 96.

**HODOS**, a lake of Transylvania, in the comitat of Doboka. It is 15 m. in length from SSE to NNW, and about  $\frac{3}{4}$  of a mile across at its broadest part, and is formed by an affluent of the Szamos. It abounds with fish and aquatic birds. On its banks is a village of the same name.

**HODRITSCH**, or **HODRUS-BA'NYA**, a town of Hungary, in the comitat of Honth, 5 m. W of Schemnitz. Pop. 3,340.

**HODSAGER**, a village of Denmark, in Jutland, in the stift of Ringkiøping, 10 m. ESE of Holtsbroe, near the r. bank of the Stor.

**HODSOCK**, a lordship in the p. of Blythe, Nottinghamshire,  $4\frac{1}{2}$  m. NNE of Workop, on the Rytton. Pop. in 1831, 228; in 1851, 205.

**HODY**, a department and commune of Belgium, in the dep. of the Liege and arrond. of Huy, watered by the Ourthe. Pop. of dep. 469; of village 170.

**HOE**, a village of Denmark, in Jutland, in the stift of Ripen, 3 m. S of Oxbye, near the W bank of Hierring Bay.

**HOE**, or **HOO**, a parish in Norfolk,  $2\frac{1}{2}$  m. NNE of East Dereham. Area 1,400 acres. Pop. in 1831, 235; in 1851, 223.

**HOECK**, a commune of Belgium, in the prov. of East Flanders, dep. of Erembodegem. Pop. 637.—Also a com. in the same prov., dep. of Audegem. Pop. 227.

**HOECKXKEN**, a commune of Belgium, in the prov. of East Flanders, dep. of Wichelen. Pop. 299.

**HOEDIC**, or **HEDIC**, an island in the Atlantic, near the French coast, in the dep. of Morbihan, cant. and 3 m. E of Belle-Isle-en-Mer, and 12 m. from the mainland, in N lat.  $47^{\circ} 20' 46''$ . It is  $1\frac{1}{2}$  m. long, from E to W, and about 1 m. in breadth. Its NE point is defended by Fort Pengarde, and on its S side is Port-er-Cos. Its shores on the NW and SE are studded with rocks which extend a distance of 2 m. into the sea; on the SW is a tower furnished with cannon and surrounded by a broad ditch. The only production of the soil is corn, and the inhabitants, about 250 in number, find their chief employment in fishing.

**HOEF**, a commune of Belgium, in the prov. of Limburg, dep. of Helchteren. Pop. 132.—Also a com. in the prov. of Brabant, dep. of Uccle. Pop. 84.

**HOEGANAES**, a village and parish in Sweden, in the prefecture of Malmöhus, haerad of Laggude, on the W coast of the prefecture, at the N entrance of the Sound, 12 m. NNW of Helsingborg, and 48 m. NNW of Malmö. The village has a small port. The parish contains extensive coal-mines, and a large glass-work.

**HOEK**, a commune of Belgium, in the prov. of Limburg, dep. of Achel. Pop. 77.—Also a com. in the prov. of East Flanders, dep. of Schellebelle. Pop. 210.—Also a com. in the same prov., dep. of Selzaete. Pop. 908.—Also a com. in the same prov., dep. of Zele. Pop. 419.—Also a haerad of Sweden, in the S part of the prefecture of Halmstadt, intersected by the Laga-an. Its chief town is Laholm.

**HOEKESTRAETE**, a commune of Belgium, in the prov. of East Flanders, dep. of Knesselare. Pop. 670.

**HOEKJE**, a commune of Belgium, in the prov. of E. Flanders, dep. of Waerschut. Pop. 212.

**HOEKSSEN**, a commune of Belgium, in the prov. of W. Flanders, dep. of Luchristy. Pop. 674

—Also a com. in the prov. of E. Flanders, dep. of Hautem-Saint-Lievin. Pop. 140.—Also a com. in the prov. of E. Flanders, dep. of Wieze. Pop. 132.

HOEKSTRAET, a commune of Belgium, in the prov. of Brabant, dep. of Hever. Pop. 84.

HOEL, a parish of Norway, in the diocese of Aggershuus, bail. of Buskerud, 87 m. NW of Christiania. Pop. 2,500.

HOELAND, a parish of Norway, in the diocese and bail. of Aggershuus, 36 m. ESE of Christiania. Pop. 3,534.

HOELBECK, a department and commune of Belgium, in the prov. of Limburg, arrond. of Tongres. Pop. of dep. 301.

HO-E-LANGO, a pass on the frontiers of Ladakh, between the Pangchoche valley and Ororotse. Capt. Strachey estimates its alt. at 18,600 ft. above sea-level.

HOELEDEN, a department and commune of Belgium, in the prov. of Brabant, arrond. of Louvain. Pop. of dep. 722; of com. 153.

HOELST, a commune of Belgium, in the prov. of Antwerp, dep. of Baelen. Pop. 73.

HOENHEIM, a commune of France, in the dep. of Bas-Rhin, cant. of Oberhausbergen. Pop. 1,222.

HOENRIK, a commune of Belgium, in the prov. of Limburg, dep. of Exel. Pop. 83.

HOERDT, a commune of France, in the dep. of the Bas-Rhin, cant. of Brumath, on the r. bank of the Zorn. 9 m. N of Strasburg. Pop. in 1841, 1,539.

HOESKEN, a commune of Belgium, in the prov. of E. Flanders, dep. of Zonnegem. Pop. 219.

HOESSELT, a department and commune of Belgium, in the prov. of Limburg, arrond. of Tongres. Pop. of dep. 2,014; of com. 1,645.

HOESSELT-VIEUX, a commune of Belgium, in the prov. of Limburg, dep. of Hoesselt. Pop. 369.

HOETJES BAY, an inlet on the coast of Saldanha bay, on the W coast of Cape Colony, in S lat. 33°, E long. 17° 52'. Vessels can anchor here in from 3 to 7 fath. close to and land-locked.

HOETSEL, a commune of Belgium, in the prov. of E. Flanders, dep. of Somergem. Pop. 380.

HOEVE, a commune of Belgium, in the prov. of Brabant, dep. of Teslett. Pop. 148.—Also a com. in the prov. of Antwerp, dep. of Vosselaer. Pop. 102.

HOEVELAKE, a bail. and village of Holland, in the prov. of Guelderland, 14 m. W of Arnheim. Pop. 624.

HOEVEN, a commune of Belgium, in the prov. of Antwerp, dep. of Olmen. Pop. 109.

HOEVENEN, a commune of Belgium, in the prov. of Antwerp, dep. of Eeckeren. Pop. 90.

HOEY. See HUY.

HOEYLAERT, a department and commune of Belgium, in the prov. of South Brabant, arrond. and 8 m. SE of Brussels, near the forest of Soigne, and watered by the Isque. Pop. of dep. 2,138.

HOEYLAND, a parish of Norway, in the diocese of Christiansand, bail. and 12 m. SE of Stavanger. Pop. 1,469.

HOEYTTAEINEN, a lake of Russia in Europe, in Finland, towards the centre of the gov. of Kuopio, in the district of Oefre-Karelen. It is about 30 m. in length from N to S, and 12 m. in breadth; and communicates on the SW with Lake Wüinijaervi.

HOF, a village of Iceland, near the S coast, in N lat. 63° 54', W long. of Copenhagen 29° 22', at the S foot of the Hofsfjall [alt. 2,395 Danish ft.], and 4 m. SSE of Sundfell.—Also a v. in Nord-möla-sýsla, near the l. bank of the Hofsa, a stream which flows in a course of 20 m. E by N into the Vopna-fiord.

HOF, or DWOREC, a municipal town of Moravia, in the regency of Brünn, circle of Olmütz. Pop. 2,457, of whom only 17 are Protestants.

HOF, or HOFF, a hamlet of Prussia, in the prov. of East Prussia, regency and 33 m. S of Königsberg, circle and 11 m. SW of Preussisch-Eylau. A sanguinary engagement between the French and Russians took place here in 1807.—Also a village of Illyria, in the gov. and 24 m. SE of Laybach, circle and 11 m. W of Neustädtl, on the l. bank of the Gurk. It has several iron-works.

HOF. See GASTEIN.

HOF, or STADT-AM-HOF, a town of Bavaria, capital of the landgericht-bezirk or presidial of the same name, in the circle of Upper Franconia, 33 m. NNE of Bayreuth, 54 m. NE of Bamberg, on the l. bank of the Saale, and on the Saxon-Bavarian railway. Pop. in 1846, 8,049. It is walled, has 2 suburbs, and contains 4 Lutheran churches, a gymnasium with a large library, an hospital, and an orphan's asylum. Since 1823, when it was to a great extent destroyed by fire, it has been built in a regular manner, and its streets are well-lighted at night. It has extensive manufactories of woollen and cotton fabrics, yarns, leather, paper and colours, and a large brewery; and in the environs are considerable mines of iron and marble quarries. Fairs are held here twice a-year. H. was founded in the 11th cent., and soon after erected into a free imperial town. Pop. of presidial 15,375.

HOF-AN-DER-MARCH, a town of Austria, in Upper Austria, ldgh. of Vienna, and circle of Korneuburg, near the confluence of the March and Stempelsbach. Pop. 351.

HOFACH, a district of Arabia, in the mountainous part of Yemen, near the confines of Tehamah.

HO-FE-HIN, a district and town of China, in the prov. of Gan-hwuy, div. of Leu-chu-fu.

HOFEN (WEST), a town of Hesse-Darmstadt, 3 m. from Ost-Hessen, on the Seebach. Pop. 1,838.

HOFENHEIM, a village of Baden, in the circle of the Lower Rhine, bail. and 2 m. NW of Sinsheim. Pop. 1,380.

HOFEYND-ET-BIST, a commune of Belgium, prov. of Antwerp, dep. of Grobbendonck. Pop. 678.

HOFF, a village of France, in the dep. of the Meurthe, cant. and 1½ m. N of Sarreburg, and 30 m. NNE of Lunéville, on the r. bank of the Sarre. Pop. 465. It has an oil-mill, a brewery, and tile and lime kilns.—Also a parish of Norway, in the diocese of Aggershuus, bail. of Hedemarken, 54 m. NNE of Christiania, on the Glommen. Pop. 6,009.—Also a village in the bail. of Christiania, on the Dramma.

HOFFE AND ROW, a township in Appleby St. Lawrence parish, Westmoreland. Pop. in 1851, 93.

HOF-GEISMAR, a town of Hesse-Cassel, the cap. of a circle of the same name, in the prov. of Lower Hesse, on the l. bank of the Esse, 6 m. SSW of Trendelburg, and 14 m. NNW of Cassel. Pop. 3,503, of whom a large majority are Jews. It is enclosed by walls; and consists of three parts, viz. Peterstadt, Altstadt, and Neustadt. It has 2 churches, a synagogue, an hospital, and a handsome public fountain; and possesses manufactories of linen, tobacco, paper, vinegar, and brandy. Linen forms its chief article of traffic.—About 1½ m. from the town are the baths and castle of Schömburg, the latter of which was built in 1787, near the site of an ancient castle of the same name.—The circle, or administrative division of H., comprises an area of 240 sq. m., of which nearly one-half is arable land. The greater proportion of the remaining surface is covered with wood. Pop. in 1840, 37,887. It is a generally mountainous district; and contains the forest of Reinhardswald, the most extensive in the principality. The principal productions of the soil are rye, oats, beet-root, lint, hemp, forage, and, in small